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Address.

THE SCOURGE OF NOSTRUMS AND IRREGULAR PRACTITIONERS.

CHAIRMAN'S ADDRESS BEFORE THE SECTION ON MATERIA MEDICA, PHARMACY AND THERAPEUTICS, AT THE FIFTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, AT ATLANTIC CITY, JUNE 7-10, 1904.

OLIVER T. OSBORNE, M.A., M.D.

Professor of Materia Medica and Therapeutics at Yale University.

NEW HAVEN, CONN.

One of the duties of your chairman is to open the annual session by an address, and such should embody recommendations for the improvement and betterment of this section. I can not expect to match the valuable recommendations, elegant diction and masterful delivery of my predecessor, but thank him for setting a mark at which it is an honor to aim.

Our program shows the attempt of your officers to give due attention to each part of our expansive title in so far as it is of interest to medical men.

The subject of pure foods and pure drugs should especially interest our section, and each member should keep himself posted concerning the most frequent adulterations of foods and drugs. Every senator and representative in congress should receive all resolutions passed by medical societies bearing on this subject, and it should not be by our neglect that they do not understand the necessity for active legislation in this matter.

I should urge that the executive committee, which consists of the last three presidents, be made the nominating committee. This requires no special permission or ruling by the House of Delegates, but can be voted by you at any meeting. This will insure the careful and thoughtful selection of your future officers.

I also suggest that each year you elect a vice-chairman, one whom you are willing to advance the following year to full chairmanship, and who would serve as chairman if for any reason the elected chairman was unable to attend to his duties. A vice-chairman could also well relieve the chairman of some of his administrative work.

Another matter needs your careful attention and consideration. A committee should be appointed to present a plan for the best method of beginning a systematic war against patent medicines, nostrums, fake cures, the reckless sale of poisons and harmful narcotics, fraudulent advertisements, the swindling use of the mails and the illegitimate practice (without medicine) of fakers, illusionists, rubbers, weaklings, monomaniacs, rascals who charge for divine power and those deluded creatures who watch disease gain a permanent hold on the helpless while they in an unscientific manner "work" the sick with multitudinous means of unscientific, nauseating, meaningless and senseless words, and then demand tangible monetary compensation for time and life wasted. To this end, and knowing that we can never do more good than when we are preventing harm, I propose to present to you briefly the exact status of this scourge of poison venders and pseudo-practitioners in our country to-day.

While wonderful cures and more wonderful curists have been in vogue ever since Hippocrates, and while the ignorance and superstition of the dark ages fostered and nurtured all such delusions, there was probably never more belief in or reaching after mysterious means of treatment or more taking of mysterious mixtures than now. The cause of this is that the nervous, high tension of our daily lives requires more mind sedatives, whether they be narcotic drugs or harmless mixtures taken because the high price and lavish promises on the labels cause autosuggestion of rest and cure, or whether some person outside the pale of ordinary life appeals to the imagination by hypnotism, suggestion, apparatus, message, letters, literature, divination, or more gross quackery. All (actually, if narcotic drugs) quiet the nervous system and appeal to the mind, and in either case some unscrupulous person or persons reap pecuniary benefit out of all proportion to the small amount of good done or in spite of the gross harm inflicted.

The increased knowledge of disease and of medical science and of medical problems possessed by the laity and disseminated by the press has not been kept pace with by proper protection against the greed of the human man-eater who preys on his sick brother. The same press, on the same sheet that it gives wise sanitary advice lauds (irresponsibly, of course, but for pay) "cures" that do not cure, "harmless" preparations that are not harmless, and publishes the "cures" and certificates of cures that do not take place, that are forgeries, or that are cases of hypnotic influence that should be prohibited by law. Hence the credulous—and all are more or less credulous in the mysteries of medicine—begin to pay for these advertisements with their money and their life blood.

These certificates of nostrum cures are no new thing, for even before Hippocrates the tablets in the temples of the Asclepiadæ told of wonderful cures effected by the most absurd means or ridiculous methods. But would it not seem that we had outlived such unscientific clinical reports?

That the people of the United States to-day crave narcotics, or something to quiet nerve debility is proved too surely by the ever-increasing sale of alcohol, opium and cocain. The use of alcoholic beverages in the United States has nearly doubled since 1880, and in 1903 the per capita expense for alcohol was in the

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United States was $17.33.[1] This increased use of alcohol is not due to the increase of individual use or to an increase of the number of individuals using it as such. I am told that one patent medicine firm uses 500 barrels of whisky per week in making its product.

Russia, Germany and France as well as ourselves are at work on this liquor question. It is not the work of the "total abstinence" and "no license" advocates alone that will succeed in diminishing the amount of alcohol consumed. What the people should know, and especially temperance organizations, is that most patent medicines and nostrums contain alcohol, and the use of those that contain it is ever on the increase.

Some of these nostrums have been investigated by state boards of health, notably by that of Massachusetts. To say nothing of the morphin and cocain that some of these patent medicines contain and the harm they will thus do, and to say nothing of the enormous amount of coal-tar nostrums that is taken for pain, notably headache, and which sooner or later deteriorate the system, causing more or less permanent debility, let us note what the alcohol content is of the most used patent so-called tonics.

According to Dr. Hiss of Chicago, the annual sale of patent medicines in the United States must reach the enormous sum of $60,000,000,[2] and a large portion of this does positive harm. It is stated that one of our smaller middle west cities alone turns out 21,000,000[3] barrels of patent medicines per year, and in France they even have slot machines for vending patent medicines. A tonic strongly recommended against alcoholism was found to contain 40 per cent. of alcohol, and is probably rated as a sure cure.[4] Another nostrum contains 23.5 per cent. of alcohol in the form of whisky, and in some communities its sale is at least 25,000 bottles per 100,000 people. Many other popular nostrums contain from 17 to 41 per cent. of alcohol, and some Jamaica ginger sold in no-license towns contain 90 per cent. For more detail of this subject, I would refer to the pamphlet published by Mrs. Martha Allen of Syracuse, N. Y., to the Massachusetts State Board Analyst, Document No. 34, and to the *Ladies' Home Journal* of April 26, 1904.

Enough has been said to show that it is time for some one to act in this matter and to seek means to prevent the free sale of alcohol-containing nostrums. Austria, Belgium, Germany, Sweden, Brazil, Russia and Japan regulate the sale of patent medicines.

Now, what shall we do with the press? Were it not for the daily papers and periodicals this enormous sale of patent medicines could not take place. This auto-suggestion of disease and disease symptoms and then the positive promise of cure causes frail human nature to give the stuff a trial, and as is expected, the narcotic or the alcohol gives a taste for more.

It is a pleasure to note that the *New York Times* refuses all objectionable advertisements. The same is true of *Truth*, a Buffalo weekly paper, and *Everybody's Magazine* announces that patent medicine, curative and other objectionable advertising will be declined. Doubtless many other papers and periodicals also decline to take objectionable advertising matter, though I am not cognizant of their names, but can we not hope unitedly, little by little, to obtain the above ruling by many papers and journals? Michigan and Iowa take the lead in suppressing nasty quack advertisements, and let us trust that other states will soon follow. But what shall we do with a journal that states that it is "for the home" and "for the young" having the following in its advertising columns:

"For ladies only. Private tips. Should the number of babies be limited? This book will bring you relief."
"Ladies' never failing monthly remedy."
"Ladies! Harmless; relief sure and certain."
"Ladies, when in need."
"The folly of being good. Four full length pictures."
"How to be happy in love."
"An easy road to marriage life."
"A young girl's book of experience."
"Only a boy; for sports only; exposes the wiles of the libertine."
"The social hell."
"Lost vitality."
"Weak men cured free."

Even some of the religious press is not free of these advertisements; in fact is full of them, and consumption cures, cures for Bright's disease and cancer cures are rampant.

What does it need more than for us as a body to see that the postal laws of the United States are enforced to stop the publication of such frauds? As Dr. Gould so well says in *American Medicine*, "Why do we leave to others work that we should do ourselves? All honor to *Physical Culture*, which has exposed the fraud of thirteen Koch serum institutions."

Now to turn to the pseudo-practitioners. We have no statistics of their number in this country, but we have some from Germany that state that there are more than 100,000 men and women irregularly practicing medicine in that small country. One statistician says that he has found 150 cases of cancer in his province, and of these 25 were attended by authorized physicians and 108 by quacks, and he thinks that it is nearly as bad with other diseases.

The German government and England have begun a systematic fight against these charlatans, and shall we be behindhand? We carry our free to come and free to go, free to live and free to die, free to cheat and free to be cheated too far. We should seek for combined action through the American Medical Association with the American Pharmaceutical Association and the medical press.

Probably in many nostrums and in some of the pseudo-medical treatments of disease or disturbance there is a grain or two of truth, which, however, has been so magnified and lauded for financial gain that nothing but quackery, deceit or insanity is left. Dr. Oliver Wendell Holmes' definition of a pseudo-science can not be improved on. He says[5] that the beliefs consist of positive assertions, and all sustaining evidence is received and all negative evidence is denied, and "it is invariably connected with some lucrative practical application. Its possessors and practitioners are usually shrewd people; they are very serious with the public, but wink and laugh a good deal among themselves. The believing multitude consists of women of both sexes, feeble-minded inquirers, poetical optimists, people who always get cheated in buying horses, philanthropists who insist on hurrying up the millennium, and others of this class, with here and there a clergyman, less frequently a lawyer, very rarely a physician, and almost never a

1. Amer. Med., April 18, 1903. (Abstract from American Grocer.)
2. Martha Allen's Pamphlet, 948 Delaware St., Syracuse, N. Y.
3. THE JOURNAL A. M. A., March 21, 1903. (Abstract from New York Commercial.)
4. Massachusetts State Board of Health Reports.
5. New York Med. Jour., Nov. 28, 1903.

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horse jockey or a member of the detective force. A pseudo-science does not necessarily consist," he says, "wholly of lies. It may contain many truths, and even valuable ones. The rottenest bank starts with a little specie. It puts out a thousand promises to pay on the strength of a single dollar, but the dollar is very commonly a good one."

Official examination of every nostrum, official investigation of every so-called cure, official sifting of every new discovery, and laws to protect against irregular practice, illegitimate advertising, unwarranted promises, and the prevention of hypnotism and undue influence in any form would soon eradicate this scourge from our country.

The power of mind over body (perhaps increasing as we evolute into something higher) is and always has been recognised by practitioners of medicine, but we should view this power more closely and study it in reference to the wonderful growth of believers in mind cures.

From ancient times down through the middle ages the use of talismans, amulets, charms, incantations, words, letters, verses or other nonsense was in vogue. The most persistent of these supposed protections against disease or harm have been amulets and charms. The horsechestnut, the coral necklace, the iron ring, the rabbit's foot, the camphor bag, have all the same effect which they always have had and are as efficient as Pope Adrian's dried toad and Sir Walter Scott's "parings of nails and hair wrapped in a lump of clay," or as were Perkins' tractors, or the wonderful nonsense cure of hydrophobia for which the Empire State of New York paid $1,500 less than a hundred years ago. Even the surrounding of a smallpox patient with red light is only a revival of what was done in the time of Edward II of England, and in the late South African war the English had difficulty in preventing the Boer refugees from painting their entire bodies with green paint when they were sick.

All of these things doubtless have a certain power to prevent fear by the impression which is made on the mind, and we recognise the influence fear has during periods of danger or epidemics. It is sometimes difficult to ascertain whether a person has the disease that is epidemic or an imitation of it, and these charms make the same impression on the mind as does Eddyism, and the imitation disease is cured.

We are just now suffering from an epidemic of psychologic disease evidenced by the growth of medical quacks and the number of their more or less seriously demented followers. All of these different means or methods of impressing the mind appeal to the emotional, the weak-minded and the hysterical. Each of these different cults despises not only regular medicine but all other cults.

All honor to the various medical editors who are impressing the profession with the fact that something should be done to stop these fanaticisms that are gaining such ground in our country, and especially are we indebted to Dr. George M. Gould, editor of *American Medicine*, for doing much to prevent our continued lethargy in this important problem, and I must thank him for considerable of my data.

The beginning of each of these cults or sects is either with a desire to gain money through hypnotic suggestion, or is a species of insanity, giving its most typical evidence in the great "I am," though in a few instances notoriety seems to be all that the leader desires. Another prerequisite to success seems to be an absolute lack of medical knowledge. The less a man knows of the human body in health and disease the greater his egotism and the more success he has in obtaining followers. Some of these cults combine a religion with their healing, others combine the teaching of how to make money or obtain success in life with the healing. The more unintelligible their writings and the more illiterate their articles, the more their publications seem to have circulation.

When we refer to old Roman history we think how quickly and cheaply they prepared medical men in their quack schools, but what of this in our own country, now, to-day. The diploma-selling age is not yet passed, as medical diplomas have lately been advertised for sale for $15, $20 or $25, depending on the character of the material on which they are printed. This certificate carries with it no necessity for studying medicine or any branch of it, for in April, 1903, the so-called "National School of Osteopathy" offered "Our full mail course in osteopathy, bound in five parts, examination papers and degree D.O., for $10 instead of $25." The circular goes on to say:

> To compensate ourselves, however, for this reduction of price, we must withdraw the offer of the anatomic chart and books on anatomy and physiology which we offer to our $25 students. However, as these latter works are not essential to your success as an osteopath, you will probably be much better pleased with this $10 offer. There will be no further reduction in the cost of our course at any time. We do not find that any of our students are unable to pass our examinations, because our instruction is so plain.

And these are the people that some of our state legislatures are licensing, and for whom some of our noted writers appear before legislators to advocate the issuing of such licenses.

A recent investigation in Berlin shows that 60 per cent. of the quacks who are doing good business were ordinary day laborers before they became so-called "benefactors of mankind;" that only 40 per cent. had had an elementary common school education; that 85 per cent. of the women had been servant girls, and that 30 per cent. of the total number of quacks had criminal records.

In 1903 there was an institute in Baltimore under the name of "Christ's Institution Medico-Chirurgical and Theological College," conducted by six colored men, which gave among other degrees the medical degree. This institution was incorporated in 1900, and had only one M.D. as its originator, and he signed his mark instead of writing his name. In 1903 he was a bachelor of arts, master of arts, bachelor of divinity and doctor of philosophy. Candidates for the degree of M.D. must pay $50 per annum for their instruction.

Do we think that the king's touch and the laying on of hands has gone by? Not at all. Only as late as 1895 Francis Schlatter, a shoemaker of Denver, claimed that he had the gift to heal. He was beset by such crowds wishing to shake hands with him that he stood out of doors from 6 o'clock in the morning until 4 o'clock in the afternoon for a period of three months, and during this time was visited by two hundred thousand people. As he was unable to shake hands with them all, he blessed handkerchiefs which he gave to them. His mail was enormous and reached the number, according to Huber,[6] of two thousand letters a day. This man refused all money, and hence must be placed in the

6. Huber: Philadelphia Med. Jour., March 26, 1898.

class of the harmlessly insane. He was lost sight of for a number of years, until finally we find him, Sept. 7, 1901, arrested and confined in a workhouse in Washington, D. C.

Impressions made by newspapers and the tendency of certain brains to copy can be no better shown than by some recent statistics from Vienna, which show that in the first nine months of 1902, 350 men and 98 women committed suicide in that city, and 385 other people made the attempt unsuccessfully. The ages varied from 87 to 3. The women preferred jumping out of windows, poisoning, and drowning; the men tried shooting, hanging and throwing themselves under trains. Hence it is not surprising that some one should follow Schlatter.

There was a man who called himself Francis Truth, who, in 1900, claimed through the daily press that he had wonderful powers of curing. He was arrested for fraudulent use of the mails, and during the short time that he was in detention 23,600 letters directed to him were confiscated, nearly all of which contained money.

Then we have T. Elijah Hall of Chicago, who gives "preternatural healing,"[7] and says that the germ that is present in some diseases possesses life and intelligence, and, as all animal intelligence is amenable to instruction from man's higher intelligence, it may be driven from the body with a positive forceful thought addressed to the subjective cell-intelligence. The fees for addressing forceful thoughts to these germs range from $2 to $50. He calls this "subjective cell-intelligence," but I should call it "objective cell lunacy," as the disease in the patients who seek his treatment.

Next we have a book offered us advertising an appliance which will lengthen a man's bones, cartilages and sinews at the cost of $1.25 an inch. The book states that "this system has done more toward bettering the condition of the human race than the combined results of any other ten discoveries,"[8] and some one probably believes this.

We next note the magnetic healers, and one of them issued a circular, in November, 1902, agreeing to heal those who answered the circulars sent through the mails by absent treatment, thinking about them fifteen minutes a day at $5 a case, or really $5 a thought. This man, or rascal, was taking in $2,500 a day, and was therefore agreeing to give 125 hours of absent treatment to his patients in each day of 24 hours.

Another wonderful calculator is the editor of a periodical called *The Christian*,[9] who, in an editorial, says that he is sending out 30,000 copies of his paper every month, and to each person receiving the paper he also sends his "healing and success vibrations," and says that the name of each of these 30,000 persons is "called every day in the healing-room," and as the editor of *American Medicine* says, "at the rate of 1,800 names an hour this would take 17 hours of uninterrupted 'calling' and 'healing.'" And yet some poor, demented creatures must believe this sort of trash.

The most successful exponent of this absent treatment is the Weltmer Magnetic Healing concern of Nevada, Mo. This firm claims not only to cure by correspondence, but also pretends to aid its dupes in money-getting by absent treatment or influence. Here is another fraudulent use of the mails, even if one believes in the power of absent treatment. This man promises to give individual attention to each case, yet his mail keeps eighty typewriters busy, and he was supposed to be treating, in 1902, 25,000 patients at once.

Though clairvoyancy is slightly on the wane, still, in March, 1903, one of the Cornell typhoid students was treated in Middletown, Conn., by a woman clairvoyant who gave him absent treatment. The young man died, and the state did nothing.

While the other cults are booming, spiritualism, not to be outdone, has come to the front with a half-page advertisement in the Sunday *Boston Herald*, Aug. 9, 1903, with a "School for Spirit Mediums," "where trances are taught and second sight and other supernatural powers are developed."

Also, in September, 1903, we find in Brooklyn, N. Y., a "Manna Mysteria," whose press agent is St. Peter, "reincarnate," he says. It costs 50 cents to hear this medium utter unintelligible mutterings. On one evening, when a reporter was present, St. Peter said that he did "not think Matthew, Mark and John would be present that evening, but he rather expected Luke." "James, the son of Zebedee," he said, "had an engagement elsewhere, and Stephen was down in Jersey" (he did not say whether or not he was at Atlantic City), and "Thomas the doubter was also out of town." And people in the city of Brooklyn were actually paying 50 cents to hear such rubbish.

In Germany prayer healing has become such a fad that pharmacopeias of prayers have been published, different prayers being carefully designated for different diseases and conditions.

Mental scientists, or believers in mental science, are separated by their believers from Eddyites and Eddyism. Mental science really means absent treatment, and, perhaps, there is no better exponent of this faith than Helen Wilman, and, as is so characteristic not only of this sect, but of the Eddyites, their literature is teeming with English language thrown together in heterogeneous masses, a sort of "diarrhea of words and a constipation of ideas," and a good purgative would not leave a single fact clinging to the membrane of truth. She says "each patient has instructions about how to come to me in thought, but if he can not understand these instructions, I go in thought to him, and I cure at least 80 per cent. of my patients and seldom have one who has not been discharged by a regular physician as incurable." The United States Court at Jacksonville, Fla., has recently found her guilty of fraudulent use of the mails.

A Reverend of Connecticut claims to diagnosticate disease by placing the patient's hand over his ear. He then treats them mentally at a distance. This same power of diagnosing disease has been claimed by the Dr. Flower of recent newspaper fame.

In Trenton, N. J., is an institution for instruction in mechano-neurotherapy, which graduates, with a degree, full-fledged practitioners of this ilk in ten months.

We now more closely approximate medieval history, medical healing getting closer to religion, and we have first the "Holy Ghosters," who have their headquarters in Maine, and consist of about two thousand souls. These demented creatures believe that the Holy Ghost takes care of the sick and injured; all they must do is to baptize the converts by dipping them three times, face downward, in a river, in the winter, through holes cut in the ice. This sect was quarantined this last winter on account of having neglected smallpox among their members, and now one Sanford, their leader, has been found guilty of compelling his son of 6 years to fast 72 hours

7. Amer. Med., Oct. 17, 1903, p. 613.
8. Ibid., Dec. 19, 1903.
9. Ibid., Dec. 5, 1903.

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and of refusing to allow a physician to see a boy of 14 who later died of diphtheria.

The next on the list are the "Gospel Workers," which they call themselves, and the "Holy Rollers," which the uninitiated call them. They roll around on the floor during their religious enthusiasm, and then rub oil on the heads of the converts "to get the devils out of them." This sect originated in Elgin, Pa., in 1894. One of their bishops, a Mr. Pettinger of Michigan, says that he healed a bedridden woman of 93 years of age, and that after he had administered to her she was "took with the power" and jumped out of bed. She danced around like a girl of 16, but, in an aside, he said that he preached her funeral service three weeks afterward.

Next come the crazy Doukhobors, who are Russian emigrants who have settled in Manitoba. This religious mania broke out in October, 1902, and was characterized by their sudden belief that it was sinful to kill animals for food or to use them for work or pleasure, or even to wear clothing made from animals. They consequently set adrift all their live stock, threw away their clothing, and neglected their harvests. In May, 1903, they were on the march, looking for Jesus, the men having discarded their trousers and marching in their boots and coats.

Then we have the vital physicians, who place "V.P." after their names. They belong to the society called "Vital Friends," and have an institution for teaching vitaphysics. And do we think that we have left the dark ages? Here is a treatment by a "vital physician" for a patient with hip-joint disease. The patient was commanded to drink the milk from a black cow in which had been mixed chopped-up hair from the man's head. This was to strangle the worms in the man's stomach, which were the cause of his hip-joint disease. This patient was also ordered to say invocations to his stomach before eating, and to do various physical exercises, with which he was successful in all the movements except those of his ears, which he could not budge, then or since, although his physician, the "V. P.," could move his readily.

Another recent sect are the Ralstonites, a sort of health secret society with several degrees and with a great many dire punishments for betraying secrets. To quote from one of their books: "We believe that Ralstonism is the lever that has been designed by the Creator for the work of uplifting the world," and "no one pretends that there is any other channel of help to mankind except that offered by Ralstonism." In this book of the Ralstonites are 2,237 maxims. The following are a few samples:

"Onions tell if the bowels are out of order."

"The vegetable kingdom includes everything not in the animal kingdom."

"Consumption is often due to iron."

"The optic nerve is weakened by too much starchy food."

"In diphtheria, lockjaw and other torturing maladies the agonies inflicted by germs are unnecessarily excruciating, malicious, malignant, cruel, relentless, satanic and devilish."

Poor germs!

And then this wonderful truism: "The body is a part of Nature's general plan." And we in our ignorance almost thought it was a counterpart of the sublime.

We also have the "Koreshan Universology" and the "Sun Worshippers" in Chicago, the "Chiropractics" of California, the "Cereopathics," and, to quote from Huber,[9] "The Fire Baptized Holiness Association," "The Peculiar People," "The Holiness Society of West Virginia," the cure in Maryland "by saying words," "The Pennsylvania Hexen Charms," "The Viticulturists," "The Somatotherapists," "The Magnetic Healers," "The Phenopathists," "The Sun Curists," "The Esoteric Vibrationists," "The Venopathists," "The Psychic Scientists," and the magnetic cups, instruments, harnesses, Ozone Therapists, etc., etc.

Very little need be said of Alexander Dowie, who made himself so obnoxiously prominent in New York last fall. His wonderful magnetism and hypnotic influence over individuals gave him money and followers, and he built the unique city of Zion. No doctors, no dentists, no drug stores, no alcohol, no tobacco, no shellfish, no hogs, no property that does not belong to him, and no stock that does not pass through his hands, are the rules and regulations of Zion City. Strange that his daughter, who set herself afire, should be taken for treatment to one of the proscribed physicians. Whether his disease is overpowering egotism or rascality, or a form of dementia, has not now been determined. But this is the kind of hypnotic influence, causing a person to lose his individuality and incidentally a portion of his income, that should be prevented by law.

Now, what is osteopathy? A recent editorial in an osteopathic journal said, "Still, the founder of this sect did what Lorens did long before he ever thought of it, and did it much better." The promulgator of this quackery, founded on the real value of scientific massage, is one Dr. Still, who is president of the American School of Osteopathy. He has lately in an article advocated the use of a Spanish fly blister as rendering a patient immune from smallpox, and as better than vaccine for this purpose. Dr. Newton[10] says that an Italian peasant woman, Madame Dolchin, came to this country in the early 70's and was the real originator of this sect, she asserting that disease was caused by slight deviations or displacements of the bones.

In a recent number of the journal called *The Osteopathic World* are the following words, occurring in the beginning of an article:

> Osteopathy marks the climax in the development of the healing science and art, in the culmination of evolutionary movements that have been deeply and secretly working in the development of the last two centuries for fuller and more perfect manifestation."

Now let us see what is the ground for such self-adulation. In an article in one of these recent journals, *The Osteopathic World*, we find the following plan of treatment of ovarian cysts. The writer says:[11] "I can not take time to enumerate all of the lesions, bony, muscular, ligamentous, etc., you ought to expect. For bony lesions you must look all along down both sides of the spine from the tenth dorsal vertebra to the end of the coccyx. The innominate bones have revealed some lesion in every case of abnormal cyst I have treated. Difficult to discover, but almost sure to exist, the lesion must be found and corrected." He goes on to say: "I give close attention to sacral nerves, especially where they emerge from foramina as well as to the glutei muscles. Fine results may be expected from carefully stretching the sphincter ani." He says: "After treating the tissues in close relation to the tumor, I spend one or two minutes vibrating the tumor itself. A few seconds may be given to inhibiting the inferior hypogastric plexus, occasionally doing the same to solar, hepatic, splenic and other plexuses."

10. Newton: Amer. Med., Oct. 17, 1903.
11. Littlejohn: The Osteopathic World, November, 1903.
12. Richen: The Osteopathic World, November, 1903.

"Bearing down pains may be relieved by a light inhibition on both sides of the clitoris." Indeed! "The aorta and iliac vessels may be gently lifted and manipulated. The spine itself should be stretched, and vertebræ too close should be spread. The muscles of the thigh may be stretched and rotated on femur adduction, and abduction being given as the limb is extended. In some cases we shall fail unless some work is done at perineum and labia." Disgusting! He further says, complacently: "We are in the infancy of our possibilities, scarcely beyond the period of swaddling clothes. What shall be the measure of our ability when we get our growth?"

A recent article in a journal of osteopathy says that the time will soon come when a patient will go to a hospital and apply for a fever, because fevers are curative, and fevers are Nature's way of getting rid of a disease. These quacks refer to some displaced bone, generally a cervical vertebra, all the disturbances that can occur to the human body. And they treat, successfully they claim, by various pommelings and massage, catarrh, chronic diarrhea, goiter, gallstones, St. Vitus dance, fits, asthma, deafness, hay fever, locomotor ataxia, milk leg, eczema, appendicitis, and the first stages of pulmonary tuberculosis.

But I doubt if many of my hearers realise that, in July of 1903, these osteopaths, these men and women that actually dare to publish such indecent articles as I have just read, advertising such sorts of massage as part of their daily practices, had their seventh annual convention at Cleveland, which lasted four days. The topic of one of their principal symposiums was on "Frequency of Treatment," and the discussion of this topic lasted a whole evening with five regularly appointed discussers. After the above quotation from the treatment of ovarian cysts, this subject might be a very pertinent question.

The so-called Still College of Osteopathy is now located at Des Moines, Iowa, and their advertisements stated, in November, that 375 students were in attendance at the last term, and that the faculty comprised 17 professors, each a specialist in his or her department. They claim that they have dissections, that their "x-ray laboratory is notable," and "clinic facilities unsurpassed." They say that their laboratories attract rare cases for diagnosis from all over the state of Iowa; and they also emphasize in large type on the back of their journal that there is a "pure moral atmosphere" at their college. I should judge that the assertion would be needed after the quotation I have just read to you.

We now come to the most wonderful epidemic of psychologic disease of this age. This very popular fad, or species of mild insanity, or, technically, autohypnotism, or induced hypnotism through constant readings of meaningless literature, has so many advocates and followers in this country that it really has become a condition for serious thought and deserves the careful attention and combined opposition of all those who are interested in the public welfare. Eddyism counts among its adherents people from all classes and from all degrees of education. In the first place, there is a large class of people who do not believe in Eddyism, but who think that it does no harm, not realizing that the disease, once ingrafted, deteriorates the mental capacity of the individual and negatively allows disease to progress in the individual, or contagion to be started in a community. Few who adopt Eddyism and read and talk the mixture of simple, well-known truths and the irresponsible, heterogeneous, intangible and absurd teachings, or read the hodge podge of words ending in nothing, but sooner or later become mentally warped, and, instead of believing and getting benefit out of simple hope and mental stimulation, think that nothing that occurs to the physical well-being, especially if the disturbance is in some one else, is aught but a mistake of mortal mind, and finally they deny the existence of every-day facts and are hopelessly insane. Neurotic individuals, always having some trouble somewhere, are undoubtedly made better if the disease goes no further. Cases of incurable disease will grasp at this straw of hope, and may get some comfort, but incidentally sometimes suffer frightfully by their refusal of scientific aid.

Another class of Eddyites are those who are weak mentally. A writer in the *New York Sun*, May 30, 1903, says that in his limited range of acquaintance among the Eddyites he has seen seven cases of incurable insanity, and thinks that it will not be long before Eddyism will be figured as an etiologic factor in the insane found in asylums.

In most large cities of this country there are churches, richly endowed, devoted to this pseudo-religious sect, and each member becomes a menace to the mental development of the impressionable people with whom he comes in contact, and every Eddyite becomes a source of danger to the community lest he cause disease, curable in its incipiency, to be neglected, or allows some contagion to spread from his ignorance and denial of such a possibility as contagion. In their last conclave in Boston, in June, 1903, eighteen thousand communicants of this pseudo-church met and gave homage to Mother Eddy. A large deputation of these eighteen thousand went to Concord, N. H., and, as they could not see Mrs. Eddy, kissed the stone steps that lead to her house.

Last year, while the American Medical Association was meeting in New Orleans and promoting scientific discussions and measures to prevent and stay disease, it was announced in the papers that Mrs. Eddy had contributed one hundred thousand dollars to construct an Eddyite church in Concord for the dissemination of the belief that "there is no disease, and that there can be no such thing as disease;" this race denying everything, and she even finds it necessary in her book, "Science and Health, with Key to the Scripture," on page 374 of the 1896 edition, to state that "until it is learned that generation rests on no sexual basis, let marriage continue."[12]

This disease has outstretched our own country and gone to Europe, and in Germany we find, only last year, that Eddyism was the sensation of the hour, and that the Emperor deemed it necessary to take energetic measures against its spread. Mrs. Eddy's book sold in Germany for 20 marks, or $5, a copy.

Dercum says that "Eddyism is more than a passing fad; it is a great and actual danger. The denial of all disease, the neglect of all medical treatment, the defiance of all sanitary regulations, make the so-called Christian Scientist dangerous not only to himself and his family, but to his neighbors."[14]

Child aptly says: "How we, an organised medical profession, and a civilised people, can and do permit Christian Scientists to treat disease and surgical conditions, in spite of common and frequent deaths due to their ignorance and neglect, is beyond comprehension."[15]

Gould, in *American Medicine*, says the result of a series of factors developed the disease of Eddyism, which is a conglomeration of "superstition, irreligion, worldly

12. Philadelphia Med. Jour., May 16, 1903.
14. Dercum: Cohen's System of Physiologic Therapeutics, vol. viii.
15. Child: THE JOURNAL A. M. A., Aug. 1, 1903.

cunning, scientific ignorance, historic indifference and mystical moonshine, the like of which will never again exist. It is a unique product in the world's history, and students of sociology and morbid psychology should gather every possible data."[16]

Now, who is this Mrs. Eddy? She is Mrs. Mary Moss Baker Glover Patterson Eddy. Mrs. Eddy has had three husbands, and the last one, she says, "died of arsenical poisoning mentally administered." She began her school of teaching, in 1867, with one student, and in 1881 obtained a charter from Massachusetts for her metaphysical college, which was located in Boston. At this institution the student must pay $300 for twelve half days of instruction, and the whole course lasted but three weeks. They then received a diploma. In 1889 the new diploma laws of Massachusetts closed this institution, at which time Mrs. Eddy declared that three hundred students were clamoring for admission. If this were true, they would have paid $90,000 for twelve half days of instruction, probably the highest tuition fees ever required for instruction on any subject. She acknowledges this tuition fee was large, but says she "was led to name this amount by a strange providence."[17]

The main source of her wealth is doubtless the sale of her book, without which no person can become an Eddyite, and one of the last editions, if not the last, was numbered 220, and each book brings $2. If each edition was a thousand copies, the income from her book would be nearly $500,000. Each believer is also supposed to buy one or two of her souvenir spoons, and must pay a per capita tax to the mother church at Boston.

One of the sacrilegious hymns sung by these people is, "Jesus Loves You; So Does Mother." These healers, she says, should prepare themselves by no other books than the Bible and her book, "Science and Health."

Her whole teaching is to claim that there is no such thing as disease; there is no such thing as pain; everything is a mistake of mortal mind. Their enormous literature comprises simply the throwing together of words without any meaning, of which here is one small sample which emanates from Mother Eddy herself. She says: "God Spirit being All nothing is matter," and then she tells you to read this backward:

Unity is non-ethical. It simply is. God is! Energy is! Power is! Light is! Life is! Thought is! Love is! Attraction is! Electricity is! Man is! Existence is the beginning of our search for happiness. Existence is non-ethical. It is a mistake to call God good.

I see that my strength is God, and therefore I know no weakness or tired feeling. I am eternal energy. My peace is God, and therefore I am eternal harmony. All presence is God, and there is no presence of sin. All existence is God, and there is no existence of evil. I affirm the allness of truth. I am the truth, for there is not anything for me but truth to be. I am the whole truth as it is undivisible unto parts. I see that I am truth and all goodness there is. I can not be sick, for my life is the almighty.

The first break in this insane assertion that there is no such thing as disease came a year and a half ago, when Mrs. Eddy's dictum went forth that Eddyite healers should not treat contagious diseases. This means that these poor, ignorant ilk, troubled with a form of insanity, without any medical instruction whatsoever, are to decide at the patient's bedside, whether he has or has not a contagious disease. And yet we are three years into the twentieth century!

I leave it to this Section to have the honor of inaugurating a systematic warfare against this blight on our fair country's escutcheon, and I will close this already long address by a little poem whose authorship I do not know:

CHRISTIAN SCIENCE.

"Oh, God is so good,
If we sit down and brood,
On the goodness and 'Allness' within and without us,
We need have no fear.
Our crackers and beer,
Will flow from the 'Allness' and goodness about us.

"Of course there's no evil,
God's not so uncivil
To make us imperfect and send us to thunder.
'There's nothing but love'—
In the heavens above,
The pockets of men and the hearts that beat under.

"'There can be no trouble'—
The body's a bubble—
It's all a 'mistaken belief' and a dreaming.
God made us to feel us,
Till some one should school us,
To see what see to be only a seeming.

"'We're nothing but spirit'—
We really don't hear it—
Or see it, or taste it, or smell it, or feel it.
'There is no sensation'
Except the temptation
To think what we think, when we think we can't hear it.

"'Tis quite a mistaken
Idea we've taken,
That there's but one method of race propagation.
A child now to bother
About who's his father
Shows stubborn contempt for the new revelation.

"'There's nothing but mind'—
Though created so blind
We're all of us nursing some little 'delusion',
But friends by the score
(For a dollar or more)
Will kindly remove the distressing 'illusion'.

"With the best of intention
The Lord failed to mention—
While healing the halt, and the deaf and the blind—
The trick of his healing
Was simply revealing
A 'mortal deception' of 'immortal mind'.

"And that these signs and wonders
Arose from the blunders
The Father had made in creating mankind.
And, until he was ready
To send Mrs. Eddy,
The world must remain to his purposes blind."

16. Amer. Med., Sept. 19, 1903.
17. William A. Purrington: Christian Science: An Exposition.

Floating Hospitals for Pulmonary Diseases.—Recent news from Vienna states that the Austrian-Hungarian Floating Sanitarium Company, of London and Vienna, is meeting with considerable financial encouragement owing to the prominence of its chief director, Dr. Semon, physician to King Edward. The company intends to build big hospital steamers to travel about the Austrian, Italian and French coasts—anywhere where it is warm and sunny. The accommodations will be principally reserved for people with lung trouble, and elaborate plans for their relief and cure are being worked out by eminent physicians here and in England. The company expects to start with a capital of $5,000,000. It has procured favorable opinions from many medical authorities. M. Murel is the chief promoter.—*American Medicine.*

Original Articles.

MULTIPLE FRACTURE OF THE LOWER JAW COMPLICATED BY DOUBLE FRACTURE OF THE UPPER JAW.*

THOMAS L. GILMER, M.D., D.D.S.
CHICAGO.

The following case, with treatment, is considered of sufficient interest to present for your consideration:

From St. Luke's Hospital record of May, 1902, is taken the following:

"*Patient.*—G. C. was brought to accident ward about 1 a. m., May 12, 1902, in police ambulance, presenting the following lesions:

"1. Fracture of lower jaw multiple: (a) just to left of symphysis between two left incisors, compound in mouth; (b) on right side between bicuspid and first molar; (c) at angle of jaw right side, simple; whole lower jaw was flattened anteroposteriorly and dropped somewhat toward sternum.

"2. Fracture of upper jaw: (a) palate and alveolar processes broken from attachments and freely movable; (b) both alveolar processes broken loose from palate; (c) hard palate seemed fractured—anteroposteriorly throughout nearly the whole length—near the middle line. (Later examination did not positively confirm this.)

"3. Loss of teeth. Upper jaw: (a) four incisors; (b) both canines. Lower jaw: (a) left central incisor.

"4. Anterior portion of upper alveolar process detached from bone above and space so formed communicated freely with right nostril and probably with right antrum of Highmore.

"5. Extensive laceration of lower lip.

"6. Incised wound of chin.

"7. Hemorrhage from right ear not manifested until 12 hours after accident.

"8. Hemorrhage into soft parts about both eyes and into conjunctivæ.

"9. Hemorrhage subcutaneous about both ears.

"*Cause of Injury and Emergency Treatment.*—Fall from second-story window on a stone pavement. History of intoxication obtained from roommate and confirmed by breath. Was in a heavy stupor, not unconscious, rather restless, and was continually spitting blood. Lower lip and wound of chin sutured with silkworm gut, about three sutures in each, in accident ward. Hemorrhage from nose and mouth was free and showed no tendency to stop. Both nostrils packed with iodoform gauze about 3 a. m. Hemorrhage only partly checked and about 5 a. m. space leading up to nose, above the fractured alveolar process, was tightly packed with iodoform gauze. Hemorrhage then ceased after sufficient loss of blood to be appreciated constitutionally. Patient became more wideawake toward morning and has remained conscious and rational. Was seen by Dr. Gilmer about 2 p. m., who wired, provisionally, the two teeth at sides of fracture near symphysis. Wet cold compresses were applied over face, and mouth and nose were thoroughly irrigated t. i. d. with saturated boric solution ℥ii, oil cassia gtt. i. Ear cleaned, filled with boric powder and drained.

"Rectal temperature, 100.4; pulse, 86; respiration, 20."

Examination.—After a careful examination of the patient I found that the nature of the fracture and injuries of the jaws were more extensive than history of the internes indicated. I found the man in a semicomatose condition, blood oozing from the right ear and also a conjunctival ecchymosis. His condition was so serious that I concluded absolute quiet more important for a few days than the setting of the bones of the jaws and face; indeed, I was quite positive that he could not recover. All of the injured parts were maintained in as nearly an aseptic condition as possible, the bowels kept open and he was kept quiet. On the fifth day he had improved to such an extent that I felt it was safe to proceed with the treatment of the fractures.

A corrected diagnosis showed that there were five fractures of the lower jaw. On the left side, one at the angle, another on the line of the first bicuspid. On the right side there was a break at the neck of the condyle, one at the angle and one at the cuspid tooth. The upper jaw was broken in half, through the median line, and the two halves were broken from their attachment above. All of the incisors and both cuspids on the upper jaw were knocked out and lost; the other teeth on this jaw were in place. On the lower jaw, strangely, only one

Figure 1.

tooth, an incisor, was missing. Those on a line with the fracture in the body of the bone were loosened.

Treatment.—In such a case no one method of treatment is applicable, therefore I decided on a combination of wiring and splinting, hoping by this means to at least partially restore the contour of the face and get a reasonably good occlusion of the teeth. Looking to this end, assisted by Dr. Arthur D. Black, an impression was made of the upper jaw and teeth in very soft modeling composition, the two lateral halves of the jaw having been temporarily restored to their normal position. On a cast from this impression a modified Kingsley splint was formed of vulcanite, square brass tubes being vulcanized in the splint on each side to receive the side arms. On the lower part of this splint wire staples were secured to receive the wires which were to be attached to the lower teeth (Fig. 1).

Figure 2.

Holes were now drilled through the bone on either side of the anterior fracture on the lower jaw and the fragments caused by this break securely wired to each other by heavy silver wire. This gave stability to a considerable portion of the body of the bone. German silver wires were now placed around the necks of the firmly set teeth on the lower jaw and secured by twisting. The splint was adjusted to the upper teeth and the two halves of the upper jaw were drawn forward and pressed upward in their normal relation with the bones above it and secured in place by laces extending from the side arms, to which they were attached to eyelets in a skull cap (Fig. 2). The wires on the lower teeth were now secured to

* Read at the Fifty-fifth Annual Session of the American Medical Association, in the Section on Stomatology, and approved for publication by the Executive Committee: Drs. B. A. Bogue, Alice M. Stoeves and M. L. Rhein.

the staples on the lower part of the splint, the lower jaw being drawn forward by this attachment to its normal position and the teeth held in apposition with the splint, the lower surface of which was shaped to correspond with what I believe to represent the normal occlusion.

Results.—The result was far more satisfactory than could reasonably have been anticipated and is fairly well shown in Fig. 3, made from a photograph taken immediately after the removal of the appliances. The occlusion of the teeth was so nearly correct that a trifle grinding made it approximately perfect. To prevent the laces slipping on the metal arms extending out from the mouth, pieces of adhesive plaster were attached to them. Through these holes were punched to receive the laces (Fig. 2).

The progress of the case was uneventful, the temperature never rising above 100.6. Primary union was secured in each fracture and the patient was discharged one month and three days after the application of the splint and the wiring of the bone and teeth.

DISCUSSION.

DR. G. V. I. BROWN, Milwaukee—I suppose it is only those who have been through the trials of excessive fractures and who are familiar with the conditions under which such cases come to the stomatologist and oral surgeon for treatment who can appreciate the very great difficulties that Dr. Gilmer has so successfully overcome in this case. Any one of the five fractures that was reported in this one jaw would have been sufficient difficulty in itself, but to take a multiple fracture

Figure 3.

with surrounding tissue having its integrity almost entirely destroyed by the traumatism makes the appearance of the patient as shown in the final result something almost beyond expectation. Commonly, the teaching with regard to the treatment of fractures is that it is necessary to apply the splint almost immediately. I note that Dr. Gilmer found it necessary to allow several days to elapse, and I think that that is the part of wisdom. Not only was it so in this case, but I believe it to be true in many other fractures of less degree. I have found it extremely useful to construct a temporary splint of modeling compound. I always carry this modeling compound in my surgical bag, and for use in an emergency it is extremely valuable. It can be softened in hot water and placed before there has been opportunity for swelling, soreness or other complication to arise. When these conditions have subsided and the patient is in condition to control with comparative comfort, a better splint can be constructed, but even without the construction of another splint, modeling compound can be made to serve the purpose.

Calcined Magnesia to Aid in Incineration of Organic Matters.—Genouil states in the *Bulletin of the Société de Pharmacie de Bordeaux*, that the incineration of organic matters mixed with mineral substances proceeds slowly and nearly always incompletely, while if some calcined magnesia be added, combustion proceeds regularly and all the organic matters will be found to be completely destroyed.

DENTAL EDUCATION.

DISCUSSION ON THE PAPERS OF DRS. HAMES, BALDWIN, CHITTENDEN AND MARSHALL IN THE SECTION ON STOMATOLOGY AT THE ATLANTIC CITY SESSION.

(*Concluded from* THE JOURNAL, *June 18, 1904, page 1619.*)

DR. N. S. HOFF, Ann Arbor, Mich.—I do not believe it will do any good at this time to discuss the possibility of the probability of a four years' course of instruction in our dental schools, because the Faculties Association will do what it pleases, and, naturally, to this we shall have to submit. The matter of arranging the course of study in our own school has been my work for several years. Our institution is not very unlike that of Harvard. We have a medical faculty with high ideals, and our work in the line of scientific medical branches is done in the medical school, and our students are compelled to do that work on the same basis as the medical students. I can readily appreciate the situation in which Harvard finds itself. Our school was early forced to go into the four years' course, not because we wanted to get ahead of anybody else, but because our medical school had taken such advanced ground on the scientific subjects that we were compelled to have our students instructed in those departments by a proper amount of time. What shall be the position of our school in view of the position of the Faculties Association, I am not prepared to say, but I do not see how it will be possible for us to do our work short of a four-year basis; and I think that if things go on as they have in the medical department we shall be driven to a five years' course. My impression is that by our plan of working we are not developing our course symmetrically. The scheme that I have been turning over in my mind is that in the first year our students should take up the technic work and as fast as possible they should be advanced through the practical courses, at the same time carrying sufficient of the scientific branches to keep up the mental discipline which they have already acquired by their high-school training. We admit students from high schools, but they are all examined, and we know what their teaching has been. We require two years of Latin, if the student has had only one language. We prefer that he has one modern language, preferably German. The majority of our students from the high school come at the age of nineteen, which it seems to me is not an excessively mature age for a man to take up technical training. I believe such men will develop their technical training more rapidly if taken up at that age than if it is delayed until later in the course; and, if we can advance them more rapidly at that period, why not do it, and at the same time, allow them to carry, not full work in the scientific departments, but only sufficient amount to keep them in mental drill; for instance, the study of chemistry and anatomy may be properly carried along because they do not need to see the relations of chemistry at the beginning. They will be able to complete the subject of chemistry later on in the course. I was talking with the deans of two medical colleges in the West in which they have dental departments, and who complained of the difficulty in getting dental work done. They asked me how we did at Ann Arbor. I said: "We don't do it; it is a physical impossibility to get a medical man who has never had any dental training to interest a dental practitioner in the subject from a theoretical standpoint. He must know something practical about it that will call the student's attention to the work. I have found this true in therapeutics; the students could answer me according to the text-books, but they had no idea of the relations to practical work. I do not know how they will make that application of their work, unless we first teach them to be practical dentists. Then when they come to these physiologic principles they will see the relation to their own work. I remember that it took me a long while to apply my 100 per cent. chemistry in my examination record to my dental chemistry. I think the profession recognizes the fact that if there is a standard it must not be dogmatic, for there are different classes, and I do not think it is necessary for the schools in Class A to take into consideration the schools in Class B. The standard is sentimental, and

it is the greatest power for the uplift of our profession. It is this unwritten standard, or whatever it may be called, that I am looking for. I think it will be thoroughly discouraging, if the course of study is put back to three years, or if a lower standard is made by the Association of Faculties. It will take years for us to get back to where we now are. I do not believe the subject has ever been studied from a proper standpoint. I have given you the standpoint from my own view.

DR. ALICE M. STRIVER, Boston—My idea is that the dental student does not work from the idea of benefiting the entire body; he does not see the relationship very often. I think we should impress on him that he is working for the benefit of the whole and not for one individual.

DR. BOGUE, New York City—The chairman and Dr. Hoff have assisted in crystallizing my incoherent views. My boy, who had promised me he would study dentistry, felt that he wanted to study medicine. I said to him, "I claim the fulfillment of that promise. When you have done that, all you can earn you may devote to the study of medicine." He worked so hard that after graduation in dentistry he had already passed his first year in medicine. He afterward graduated in medicine, and in that obtained what I had been desiring for years: that he should know when he began the study of medicine what he wanted to get out of that study. He could not do that until he had graduated as a dentist. He received his operative practice at the University of Pennsylvania, where individual ability I found could be recognized, and got this practice at an earlier age than he could have gotten it at either of the other schools. It has been demonstrated to us how the musician beginning at an early age becomes technically so perfect that his fingers accomplish the thought of his mind almost automatically. Let that musician begin later on in life and it can never be done. From that standpoint I draw a parallel with the dentist's work, and I believe that unless a dentist begins his technical work comparatively early in life he will never succeed in his profession. Now, what is his profession, gentlemen? Suppose this room full of practitioners were called in an hour from now to attend a case of broken lower jaw, how many of us are perfectly qualified to take that case in hand? How many of us would treat a case of cleft palate? I am sure I would not dare undertake Brown's operation. Right there is another cause that should call this body into relationship with the great medical body. I allude to these things, because it seems to me they have a bearing on the curriculum yet to be decided on. There are things in dental education which have been left behind which we should have with us, and one is private tutelage before the student ever undertakes to enter college. I have spent some time in the class rooms in Harvard, and in those of other colleges, and have noted the difference in what I have seen of the students. I do not say that the classes graduated at Harvard would be any better able to do the work that a dental surgeon ought to feel himself called on to do than those from other schools; but I do know all too sadly that the dental graduate as a whole is not the man he ought to be. He is not sufficiently qualified by any manner of means to take charge of the oral cavity and to keep it in health.

DR. M. L. RHEIN, New York City—These papers and this discussion and all the literature of our profession on this subject are most conclusive evidence of the correct assumption of our chairman in his paper on the crying need of symmetry in general education. My own impression in this matter is that the cause of the trouble is not in the professional education. The source is much deeper. It is in the primary methods, or pretences at methods of education to which the world has been accustomed; the education of youth from childhood up is in a very great progress of evolution at the present time, and has been progressing materially. It is impossible for us to arrive at any of the ideals that Professor Truman or Professor Hoff would like to see at the present time, and the main trouble is at the primary education. I differ entirely with the theory of Dr. Hoff and which Dr. Bogue advanced, of taking up the general medical education later. That will not cure the trouble. The trouble can be reached if the education of youth is properly conducted. The greatest progress in this direction is the induction of manual training in the primary education. Manual training brought to its proper level is the true solution of this problem. If a child in its primary education has received the proper manual training so that he becomes deft enough with his fingers as a child to do a piece of wood-carving or the work of the other departments, it will be as impossible for him to lose this deftness as it will be impossible for him to lose his skill on the ice, so easily acquired in childhood and so difficult in later life. Another thought which is uppermost in my mind in this direction is that it is impossible to make dentists. We can aid in the education of different classes of dentists, from very good ones, to certain inferior ones; and yet, out of certain material, we must recognize that it is impossible to produce any sort of dentists. The fact that so much of that material is brought into the profession with the degree of D.D.S. attached to the name is not to the credit of the institution that such men should have passed three years there when it is self-evident that they are unfit to ever become successful practitioners. In view of this fact, last year, I was led to say that I was strongly in favor of getting rid of all the poor colleges at any cost, that I thought the ultimate interest of the profession would be enhanced if any means were used to annihilate what is known as the commercial institute in dentistry. It is in these institutions that such material is allowed to go through. I have no doubt that some of it gets through the better grade of institution, but in no such proportion. I have stood aghast at the position Harvard has taken in this matter. It is to me one of the most inconceivable things for an institution of that character to do. I sympathize with everything that Dr. Briggs has stated to us as being the position of Harvard, but it is no excuse for Harvard's action. I agree with Dr. Briggs that it may be a matter of discussion whether it is better to advance the preliminary education, or whether it is better to advance the course, but that discussion should have been entered into long before the actual meeting. There were two years of the discussion before the meeting of the Association of Faculties, when Harvard had an opportunity to consider that subject in a way that she failed to do, or to lead any one to suppose that she would take the position that would be utilized by the commercial institutions for the degradation of dentistry. No one fails to realize that Harvard is not allied with them, but they take advantage of the position which Harvard has taken. As an earnest advocate for the highest advancement of dental education, I do not believe that it would suffer one iota, if at the meeting at Washington a large number of the colleges would secede from the four years' course. I believe it would result in the annihilation of the commercial colleges, because the examining boards are in favor of the four years' course. Another point of interest was that referred to by Dr. Hoff, the difficulty in securing instruction to the dental student from the medical men. That is another point where education requires an awful lot of remedying in the future; that is, the lack of proper education, not only of the medical teacher, but of the medical student, because the medical student must ultimately become the teacher. If he knows nothing about the mouth he is not qualified to teach the groundwork of medical practice to future dentists or stomatologists.

Another point, and one which has been eloquently dilated on by Dr. Marshall: We know that we are not willing to take a position lower in the scale of the medical men, and yet we are placed in that position, because we have failed to keep up to the trend of evolution in medical education. Is there any reason why our education should be inferior to that of the medical institution? None in the least. Dr. Briggs is right there. That is where Harvard is right, and we are wrong. It is not only necessary for us to stand for a four years' course, but we must not present them with a calling that places dental practitioners on an inferior basis than the medical men, if we would attract to our specialty the best of the youth of this country. We do that the moment we lower the standard of our entrance examinations in our institutions. I would like to emphasize this on the departments of the universities who are interested

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in the real uplift of the educational standard. It matters little how many students they may lose in a matter of this kind. It matters much whether they elevate the character of the material that is attracted to us. One of the curses of the general education to-day is that in the lower branches the teaching is uniform. The minds of the children are trained alike, and yet they are all totally different.

It is impossible to satisfy the desire of our friend Dr. Bogue in telling how we shall make the model dental education. I have simply tried to bring up a few of the defects; but, I want to say that if the manual dexterity is acquired in childhood, the basic principles which should precede specialization can not fail to be properly acquired. I want to introduce a resolution as part of the discussion of this subject, as follows:

Resolved, The Section on Stomatology of the American Medical Association in session at Atlantic City, sends its greetings to the National Association of Dental Faculties. We congratulate the association on the completion of the first year of the advanced three years' course. We sincerely trust that having the honor and standing of the profession in your hands, no action will be taken that will tend to lower the advanced stand that has been taken.

I would like to have this Section send to them this expression and our hope that they will not falter in the position taken.

On motion the resolution was adopted.

DR. WILLIAM LEDERER, New York City—Dr. Rhein said correctly: "Dentists are born." To my mind dentistry is both a science and an art. The man who is a scientist alone or the one who is a craftsman and an artist alone is not a dentist. Whether a course in a school is three or four years, that will not make him a better or a worse man. To have ideal conditions and to further dental education two factors are necessary; just as two factors are necessary to produce a work of art: the artist and the material which he turns into a work of art. If the most ideal conditions prevail in the institutions and the material which is entered is not capable of properly imbibing the teachings, the result will not be good dentists. Theory can be taught, but mechanical ability can not be taught, and, therefore, I should think the essential training would be a combination of the practice and the teaching. It is stated that there is only one school in this country whose degree enables a man to practice in Germany, and that is Ann Arbor. I am sure we have other schools in this country which turn out as able men as Ann Arbor. How they place the standard I do not know. Ann Arbor is a state institution. If some movement were started to create state institutions which can not be commercial, perhaps that would solve the problem, and we would have proper material and proper artists to do a work of art.

DR. EDWARD C. KIRK—I agree with Dr. Rhein that the great defect in the mind, in the career, in the qualification of the dental student for acquiring his education is the fault of his training in the kindergarten. I do not believe it is because the method is uniform, but because the method is faulty. You can not make a mind elective that has not the power of election. That is what parents are for. Education is to be of use. We study arithmetic, and we go on farther with the relations of numbers until we get into higher mathematics. Only those whose calling demands the use of mathematics employ them. There is another use of mathematics—the mental discipline. That is to get into the mind of that human being an appreciation of the fact that two and two make four—not three and seven-eighths or four and a quarter. It is to develop a respect for precision as an element of character. The great fault in the dental student is that he is not precise and does not reason logically and accurately. I had a talk with my colleague, Dr. Truman, on the bad use of English and the misspelling of these men. I kept in my examination markings a list of terms misspelled by American-born and educated students of our high schools. Dr. Truman tells me that it is a psychic state developed by the examination stress. He is very tender-hearted with his delinquents. I believe the training of the dentist should be begun in the kindergarten. There is room for us to suggest improvement in the methods of preliminary education. I agree also with Dr. Rhein that it is unsafe in the making of a dentist to postpone his manual training, and such manual training should be specific; it must be related to his calling as a dentist. I do not agree that a man should take a medical training as preparatory to dental education. I am of the opinion that we must supersede whatever he needs in the medical training. I also believe it is a mistake for a student to have his preparatory training in a dental office. Such training should be post-graduate. Under the present arrangement of the college curriculum we have the methods for training, which is a better plan than the old apprenticeship system. I think that any one who has looked at this thing conscientiously and who knows anything about the subject will agree that it is impossible to produce a dentist worthy of the name in less than four years under present conditions. I believe the whole reason why there is a desire on the part of the faculties (I except Harvard; I understand her position, and it has nothing to do with my remark; she has adopted a different plan of arriving at the same end) to revert to the three years course is purely a commercial one. I know that there would have been no opposition to the four years' course had there not been a drop in the Freshmen classes of from 50 to 75 per cent. in many instances. That results to my mind one point referred to by the essayist that as a purely commercial proposition it pays to maintain the highest possible standard. There are enough decent, honest people in the world to back up such an effort, and on the principle that honesty is the best policy, even in the absence of any other moral consideration, it would pay. The main reason is, of course, that the four years' course makes better dentists.

DR. GEORGE V. I. BROWN—I believe I am the real culprit. Mine happened to be the resolution passed in our Faculty Association for the four years' course. I believed in it very thoroughly then, and I believe in it even more now. I believe Harvard's going out last year was a mistake, and I hope that before very long the association and Harvard will meet on common ground. The criticism of the kindergarten system refers to matters which we can not change. We have to deal with students who have been educated under a system, good or bad, that has been in existence, and it is well for us to help in rearranging the future. I believe we must and will have a four years' course. No matter whether one man who is more highly educated than another can learn more in six months or a year than the other, we must base our standard on the average. There is no question that the more a man trains his fingers in dental work the better, and no one will question that he can do more of that in four years than three. I believe that if we are doing our duty we will have a personal interest in the men under our care, and I believe we can do more to uplift them ethically in four years than in three. I have had to face the proposition of trying to make a dental student do in one year the same work that medical men were doing and do 40 hours a week beside, and I found he could not do it. I am hopeful about this Faculty Association meeting. When the final issue has come on any question there have always been enough good men to carry what is right. So far as Harvard's position is concerned, the University of Iowa, Ann Arbor, and I daresay Pennsylvania, will have more than a full year more of instruction than they, but we are willing to suffer that disadvantage—if it is a disadvantage—for the sake of training much better men.

DR. EUGENE S. TALBOT, Chicago—I am glad that Harvard has taken the position she has. I am in favor of the four years' course and I am sure that there is a great deal of good going to come out of this peculiar condition in which the profession stands. It is only by this friction that we arrive at results. I am going to discuss this subject on a little different plan from what most have spoken. They have been talking along the mechanics of dentistry. The question comes up at the present time, is there not another side than the mechanics of dentistry? There was not when the first dental school was established. But, it seems to me we know a little more along the line of stomatology than we knew sixty-four years ago, and the question arises, are the dental colleges keeping pace with our present knowledge? We have been talking of the practice of dentistry as it is to-day. What will become of the practice of dentistry sixty-four years from now, if it progresses as it

has in the last sixty-four years? Are we going to remain as mechanics and manipulators? It seems to me that there are two conditions at the present time that are uppermost in the minds of the dental profession: Decay of teeth and interstitial gingivitis. We have been studying decay of teeth as a local condition, and we have advanced far enough in the last few years to know that disease of the human body has a great deal to do with decay of teeth. We know that it has much to do with the saliva of the mouth, that it produces a change in the saliva. We know that pregnancy has much to do with decay of the teeth, also typhoid fever and pneumonia. Yet at the present time, although we have been teaching sixty-four years we have not gotten down to the first principles of decay of the teeth and interstitial gingivitis. There is not a single dental college teaching the principles of the nervous system. What have we to say in regard to interstitial gingivitis? What do we know about intestinal fermentation, the great cause of gingivitis? I want to say to the teachers here that we have yet to learn the first principles of teaching these diseases and we have got to introduce them in our schools. Until we have educated students we must have educated men in order that we can teach the students the diseases of the human body. We come to the point that some school, and I hope it will be Harvard, will take the lead and will require, first an academic degree; second, two years in pathology in our medical schools, and third, manipulation; and as soon as some university will teach men to become teachers to fill our dental colleges with men who are capable of teaching, we shall have better dental students.

DR. G. V. I. BROWN—I agree with Dr. Talbot that we should have more of the teaching to which he refers. We have men here who have been teaching for years, and Dr. Talbot has said we do not teach about nervous diseases. I should like to know their statements on this question.

DR. TALBOT—There are no chairs on the pathology of the nervous system.

DR. KIRK—We teach the nervous system, but I understood the secretary to lay down rather dogmatically that the perverted nervous system had as much to do with interstitial gingivitis if not more than any other factor, except the local conditions. I think that is rather a broad statement, and there comes to the mind the proposition of which came first, the egg or the hen. There is such a thing as faulty metabolism, and that probably has something to do with the perverted nervous system. We have not taught that faulty action of the nervous system is the fundamental error, but we teach fundamentally that faulty metabolism is back of the whole disturbance.

DR. E. C. BENNETT, Boston—I do not want you to think that Harvard does not want four years or that she is standing out against it. That never has been the point. I think the time is coming when Harvard will demand four years. The time is coming when she will demand other things. While we felt that we could not take every step at once, we felt that the step which we did take was the next step to take. I can not deny the accusation that Dr. Rhein made that this thing ought to have been thrashed out before the motion was carried to make four terms the course. It seemed to me that Dr. Truman's remarks stating that there were some students whom he did not like to see go out as dentists, are an argument for my point. You can not help getting men in who are not fitted, and the men who go out are safer if they have had a good preliminary education.

DR. A. E. BALDWIN, Chicago—The question is not one of degrees; what we want is the education. Dr. Talbot is correct in his statement that we should pay more attention to the definite causes of the conditions and not content ourselves with the manipulative end. We have too many men in the profession whose minds go no farther back than the work and the correction they can give it. I do not think there is a man practising dentistry to-day or being prepared for practice who is not the better for the broadest kind of an education. In the medical school I saw as much evidence of manipulative skill as in the dental college. At the same time, I do not mean to belittle the manipulative part of the education taught in our dental colleges. We do not occupy a progressive field when we talk about going back to the pupilage system. That can not go farther than the men. If the institutions are what we suppose them to be they are a combination of the teaching of the best men, and to go from them to the office of some fossilized person—of which, perhaps, I would be one—would be very foolish. I have seen men of broad education who were failures in their chosen vocation, but I do not lay it to the broad education. There are some men who have a wonderful lack of education and who are yet wonderful successes. Education is not a method of cramming things in, but it is the drawing out of what is within. We will have some failures even with four, or a ten years' course, but we shall have more intellectual work done.

DR. M. L. RHEIN—I am sure that all the gentlemen who spoke of the manipulative point in educational requirements had no intention of objecting to the phase presented by Drs. Baldwin and Talbot. We realize that all the scientific attainment possible is valueless without the manipulative ability in our specialty. The two must go hand in hand. The point is that it is impossible to instil that manipulative ability if it is lacking in the personality of the individual, and one of the defects in our institutions is the absence of a method by which applicants may be received for a probationary period, and if it is found at the end of this time that they are out of their sphere, they may be rejected.

DR. GEORGE F. EAMES, Boston—Dr. Baldwin has stated that education is a drawing out of what is within. My idea would be to ascertain the bent of a child while in the kindergarten and in his later education, taking a broad view to determine his probable choice of professions. Then when he has arrived at the age when he knows what he wants there will be some data of value. It is not a degree; it is not a number of years, but it is the qualification of the individual to be in our specialty, and an American citizen, and when he has developed equally and symmetrically in all of these lines, he has attained the object, and it is for us to decide the time spent in preliminary education, and how much within the college walls. I believe a man who has it within him to be a success, must escape the bonds and rules of an institution by the time he is twenty-five years of age. We have not a lease on life. If we increase the length of the course, we do not have the life in proportion.

DYSENTERY.

A REPORT OF SEVERAL CASES IN WHICH BACILLUS DYSENTERIÆ (SHIGA) WAS FOUND IN WASHINGTON, D. C.*

LOUISE TAYLER-JONES, M.S., M.D.

WASHINGTON, D. C.

With the idea of obtaining some knowledge, profitable at least to myself, and of passing the summer with some interesting problem, I undertook to find out last summer if the *Bacillus dysenteriæ* (Shiga) is to be found in Washington.[1] At first the plan was to confine the work to infants, but as such cases proved hard to obtain, and as others presented themselves, this report includes not only babies, but also adults with a history of residence in Washington, and others—soldiers lately returned from the Philippines.

MATERIAL.

A few words regarding the material Washington afforded last summer may not be amiss. I was assured by both the medical profession and the laity that dysen-

* Read before the Medical Society of the District of Columbia, May 11, 1904.

1. I wish to express my indebtedness and sincere thanks to the surgeon-general of the U. S. Army for the privilege of working in the laboratory of the Army Medical Museum; to Dr. Simon Flexner, for provision of sera and other requisites which only he had at his command; to the many physicians in Washington and surgeons in the Army who have endeavored to provide me with material, and to Dr. James Carroll, who so courteously saw that all my wants in the laboratory were supplied.

tery would be plentiful; that there were always innumerable cases during July and August, and that the dispensaries were overrun with them. It was said that the hot weather would develop the cases quickly, but the hot weather did not come.

At the Emergency Hospital, from July 15 to October 15, practically nothing was found. In the history records at this clinic are a few cases of diarrhea, but of dysentery not one case is recorded. At the dispensary of the Casualty Hospital the report is similar. The Foundling Asylum did not have one case of dysentery, nor did the U. S. Government Hospital for the Insane, nor Garfield Hospital. Much time was spent in the poor districts hunting up material. Through Neighborhood House, the social settlement in the southwestern part of the city, a few women living in the alleys and by-streets in that district aided in the search; they were to give information of any cases occurring in their neighborhoods. An endeavor was made to keep in touch with two physicians to the poor and with the instructive visiting nurses. It was through one of the latter that the first case was obtained. At the Children's Hospital dispensary there were a few cases, but even here the total number of cases of diarrhea was about 60, as compared with over 90 the preceding summer. So that possible Shiga infections in this clinic were 50 per cent. more numerous in the summer of 1902 than in 1903, when this work was done. The comparative death rate for the district is in accord with the amount of sickness. Deaths during the year 1903 from dysentery, diarrhea and enteritis numbered less than 400. For the three preceding years, each, they numbered over 500, and in one of them about 550. In spite of the efforts made, my record is 20 cases examined, with 6 cases positive for *Bacillus dysenteriæ* (Shiga), showing that for the summer of 1903 dysentery was rare in Washington.

TECHNIC AND CASES.

The technic followed in isolating the Shiga bacillus was that elaborated by Dr. Flexner and his pupils. The transfer of material to bouillon was usually made at the hospital or home of the patient and carried in the tubes to the laboratory for plating. The clinical reports are here necessarily brief.

The cases (20 in number) may be divided into three groups:

Group 1.—Positive, bacteriologically, for *B. dysenteriæ*. (6 cases.)

Group 2.—Negative, bacteriologically, but clinically very suggestive. (6 cases.)

Group 3.—Negative, bacteriologically and clinically. (8 cases.)

Group 1, the positive cases, may be summed up as follows: There were 2 babies and 4 adults (3 of the latter were soldiers), making a total of 6 cases. Three organisms recovered were of the alkaline (Shiga) type, 1 baby and 2 soldiers; 3 were of the acid (Flexner) type, 1 baby, 1 soldier and 1 adult with a history of residence in Washington. All the soldiers (3) were also infected with amebæ; in the 2 cases I observed they were undoubtedly the pathogenic form,[2] *Entamœba hystolytica* (Schaudinn)—usually referred to as *Amœba coli*—and doubtless such in the third (Case 5). The number of bacilli isolated in the different stools varied from 1 to 40.

CASE 1.—Barr baby, six months old. The mother now has and maternal grandfather had arthritis deformans. Father is living and well. No brothers or sisters (one sister dead). No history of tuberculosis in family. Immediate surroundings very good. The baby was breast-fed for one month, followed by condensed milk from the first to the fourth months. Malted milk was then used until the onset of dysenteric symptoms. After that a variety of food was tried, but none agreed with her. The child was sick with loose bowels for one week before seen by me July 27, but blood had been present only twenty-four hours. The movements were not at all fecal in character, but were composed practically of curds, mucus and blood. The temperature at this time varied between 100 and 101 F. Three stools were obtained for examination; one before any rectal irrigation had been given, a second after one irrigation, and a third, the next day, after three irrigations. All were obtained under very satisfactory circumstances, transferred almost immediately to bouillon and plated within two hours. From the first, 80 per cent. of the colonies transferred to glucose agar were of *B. dysenteriæ;* from the second, 60 per cent. were of the Shiga bacillus; and from the third, of 29 colonies transferred, only 2, or about 7 per cent., were of this organism. This well illustrates the rapidity with which the organisms in the lumen of the intestine may disappear under such treatment.

The organism isolated, the acid (Flexner, or "Harris," as it is known from the patient's name) type agglutinated with the "Harris" serum as high as 1 to 1,000 within two hours. The blood agglutination was not tried. One week later (two weeks after beginning of attack) the child was taken to the Children's Hospital. The first attack of vomiting came more than two weeks after the onset of disease. The heart remained strong and the lungs clear up to the end, although the condition of the bowels from soon after the start made it seem improbable that the child could survive. She died Aug. 29, 1903, or about five and one-half weeks after the commencement of the attack.

CASE 2.—Smith, a soldier at Fort Myer. He had become ill with dysentery while in the Philippines, from which place he had recently returned. The stools, of which two were examined, were fluid, brown, fecal in character, with mucus and three or four flecks of blood. In the first of the two stools amebæ were found, doubtless *Entamœba hystolytica*, for they were large (about 30 microns) with corpuscular inclusions. Beside the Shiga bacillus the *B. coli communis* and *Micrococcus aureus* were the only organisms isolated. The bacillus, which is of the alkaline type, agglutinated the "Shiga" serum in as high a dilution as 1 to 5,000 in two hours, and "Harris" serum in 1 to 1,000 in two hours. Such a difference, of course, may be expected. The blood of the patient agglutinated the Shiga (alkaline) bacillus in a dilution of 1 to 500.

CASE 3.—Mrs. N., a patient, with a history of residence in Washington practically all her life. Five years before she had an attack of dysentery, but not again until this present attack. The stools, four or five daily, were brown, fairly fluid, small, containing some flecks of blood. Because of a lack of media at this time, only a few of the Shiga organisms found were transferred to the mannit litmus agar. All that were transferred turned the litmus pink, proving to be the acid type. The patient's serum agglutinated the acid type in a dilution of 1 to 500 in two hours. The organism isolated agglutinated in the presence of the "Harris" serum above 1 to 1,000.

CASE 4.—Gladmon baby 2½ years old. Three days previous to obtaining the material the child was reported by the mother to be passing blood. Evidently she was not very sick, for when seen she was running around in bare feet (the weather was warm) and apparently recovered. The stool was most unfavorable, dark brown, and not even showing mucus. Of the 53 stabs in glucose agar, 5 looked like Shiga, and finally proved to be at least a variety of that organism. In the presence of glucose agar, first made sugar-free, there was no gas formation, but if not first made sugar-free, gas is produced by the third day. This was tested several times, and the other Shiga bacilli in the writer's possession were tested, but did not produce gas under any conditions. This Gladmon bacillus did not produce gas in fermentation tubes in the presence of lactose, saccharose nor glucose, and in other respects is entirely like *B. dysenteriæ*. It is not the same as Hiss' bacillus "Y."

CASE 5.—J., at the General Hospital at Washington Bar-

2. Schaudinn, F.: Arb. a. d. k. Gesndtsamt, Berlin, 1903, xix, pp. 547-576.

racks. This patient had been in the Philippines where the disease was contracted. It was a case of amebic dysentery with liver abscess, which had been operated on at the Presidio some months previously. The stool examined was semi-solid, dark and unfavorable. No blood, no mucus. Of 49 stab cultures made in glucose agar, only 1 proved to be the Shiga bacillus. It was the acid type. The patient's blood agglutinated the Shiga bacillus in a dilution of 1 to 50. The bacillus isolated agglutinated "Harris" serum 1 to 50. Higher dilutions were not attempted. The work on this and the following case was done just as the investigation was coming to a close, and was not carried out as completely as it would have been otherwise. I did not observe the amebæ, but their pathogenic nature can hardly be questioned.

CASE 6.—Thompson, a soldier at Fort Myer, recently from the Philippines. Amebæ were demonstrated; they were large, active, and contained red blood corpuscles. The stool was very unfavorable, and by mistake had been placed in the thermostat. It was brown, solid, firm. Beside an alkaline Shiga bacillus, one was obtained which agglutinated with the serum, but was evidently a variety of the colon bacillus. The blood of the patient agglutinated *B. dysenteriæ* in a dilution of 1 to 100.

Group 2.—Negative bacteriologically but clinically very suggestive. (6 cases.) These include four soldiers, one adult living near Washington and one baby. The circumstances regarding two of the cases may be given as illustrations of the difficulty of obtaining the bacillus from this group. Material in one case was sent from Camp Thomas, Georgia. Although packed in a most satisfactory manner, the distance made it practically impossible for the Shiga organism to survive so long in the presence of the colon bacillus.

In the case of the baby there had been given high irrigations of boracic acid and quinin solutions three times a day for a week before material was obtained for investigation for *B. dysenteriæ*. It was not possible to isolate the organism. The blood serum of the soldier cases agglutinated *B. dysenteriæ* in varying dilutions up to 1 to 1,000.

Group 3.—Negative bacteriologically and clinically. These cases were studied more with a view to exclude them from cases of dysentery due to *B. dysenteriæ* (Shiga).

CONCLUSIONS.

1. Washington, D. C., is included in the geographical distribution of *B. dysenteriæ* (Shiga).

2. The Shiga bacillus is found in this city both in adults and children suffering from dysentery.

3. The alkaline (Shiga) and acid (Flexner) types are found here in both adults and in children.

4. An alkaline type found in the Gladmon baby case is a slight variation from the type in that in three days in glucose agar, not first made sugar-free, the bacillus produces a slight amount of gas, whereas no gas was produced with the sugar-free glucose agar. None of the other Shiga bacilli at hand produced gas in this same medium.

5. The three cases of soldiers are all double infections with *Entamœba histolytica* and *Bacillus dysenteriæ*.

An Epidemic of Cancer.—A Norwegian confrère, A. Hvoslef, describes in the *Tidsskrift f. d. Norske Laegeforening*, No. 17, 1903, an epidemic of cancer cases. There were 8 in all in a community of about 900 souls, and all seemed to group themselves about the first case, which was one of cancer of the rectum. In previous years never more than a single case of cancer at a time had been known in this district. Goiter is likewise prevalent there. The subjects were 56 to 80 years old. He gives a map of the water supply with notes on the character of the soil, etc.

PROSTATECTOMY.

REPORT OF 81 CASES OPERATED ON FROM MAY 6, 1901, TO FEBRUARY 26, 1904.

JOHN B. MURPHY, A.M., M.D.
CHICAGO.

(*Concluded from page 1561, June 11.*)

CASE 25.—Mr. S. C., aged 57 years. Occupation, weigher. Admitted to Mercy Hospital Jan. 11, 1903.

Present Illness.—Began five years ago with increased frequency of urination. For a few years he was troubled only during the winter months. Since one month ago symptoms have been very much aggravated. During the last week severe pain and straining have given but little rest. He urinates every twenty to twenty-five minutes.

Examination of Patient.—Prostate very much enlarged. Urinalysis: acid, 1013, clear, albumin present, few blood cells and many pus cells in the centrifuged specimen.

Operation.—Jan 12, 1903: Regular technic. Patient discharged from hospital Feb. 16, 1903.

Report March 29, 1904: Wound has remained permanently healed. No pain at any time. Holds urine during day from two to three hours and at night for four or five hours. Has perfect control of the urine. Has not used catheter since operation. Patient says in regard to general health, "Sound as the proverbial dollar—strong as an ox."

CASE 26.—Mr. E. O., aged 50 years. Occupation, stock raiser. Admitted to Mercy Hospital Jan. 19, 1903.

Present Illness.—Onset three or four years ago, when patient was troubled with frequent desire to urinate, passage of urine being accompanied by a burning in the urethra. These symptoms have continued to the present time. Three or four times during the last year he has had to be catheterized daily for a week or two.

Examination.—Prostate enlarged to moderate degree. Urinalysis: yellow, turbid, trace of albumin, no sugar, numerous pus cells, no casts.

Operation.—Jan. 21, 1903: Regular technic. Left hospital Feb. 22, 1903, with wound closed and control of urine good.

April 1, 1903: He states that the perineal wound has remained healed and that he has complete control of the urine. He holds urine one and a half to three hours during the day and from three to four hours during the night. Sexual function is abolished.

April 1, 1904: Wound has remained permanently healed. No pain. Holds urine during the day from two to four hours and at night from six to seven hours. Has not used catheter since operation. Sexual function impaired. Patient says he is "an entirely different man than before the operation and as well able to attend to business as twenty years ago."

CASE 27.—Mr. F., aged 65 years. Admitted to Mercy Hospital Feb. 13, 1903.

Present Illness.—He has suffered from prostatic hypertrophy for the past four years, the symptoms increasing in severity, and for the last year being very annoying. Examination showed a very much hypertrophied prostate, the left lobe being larger than the right.

Operation.—Feb. 18, 1903: Regular technic. The course following the operation was remarkably smooth, and he was allowed out of bed in ten or twelve days after the operation. March 15 he developed a slight cough, with scattered moist rales over both lungs, and temperature of 101. March 21 he suddenly became paralyzed on the left side. Temperature that night registered 103 F., pulse 110. Patient gradually lapsed into unconsciousness and died March 22.

In this case there seems to have been no connection between the operation and the illness which caused his death. Convalescence after the operation had been perfect, the wound had healed rapidly, the urine was normal and he had had no fever at any time before the onset of the fatal illness. The lesion was undoubtedly cerebral embolism, secondary to an endocarditis, but the cause of the endocarditis is obscure.

CASE 28.—Mr. E. F. H., aged 47 years. Occupation, plumber. Married. Admitted to Mercy Hospital Feb. 18, 1903.

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Present Illness.—During the past year patient has suffered from irritability of the bladder, being obliged to urinate frequently during the day and from one to three times during the night. The principal symptom from which he suffers, however, is a constant burning sensation at the base of the bladder, aggravated by urination and very frequent seminal emissions. Sexual power has markedly decreased of late.

Examination of Patient.—Prostate slightly enlarged, the left lobe being larger than the right. Examination of urine: acid, 1030, no albumin, no sugar, very few pus cells.

Operation.—March 4, 1903: By my associate, Dr. J. M. Neff. Regular technic. Left hospital April 4, 1903.

Report March 29, 1904: Wound has remained permanently healed. No pain at any time. Urinates four or five times during day and usually does not have to get up during the night. Has perfect control of urine. Has not used catheter since operation. Sexual function impaired. Patient states that he has not enjoyed better health for thirty years.

CASE 29.—Mr. C. L., aged 68 years. Occupation, retired farmer. Admitted to Mercy Hospital April 29, 1903.

Previous History.—Two years ago had a perineal cystotomy performed and about one year ago a suprapubic cystotomy, at which time several soft calculi were removed.

Present Illness.—Onset about ten months ago, shortly after the last operation. Symptoms were intense pain, burning and tenesmus on urination, with increased frequency, of late every half to one hour. Since six months ago he has catheterized himself once or twice a day. Residual urine eight ounces.

Examination.—Prostate enlarged by rectal examination. Urinalysis: quantity in twenty-four hours, 1440 c.c. Sp. gravity 1009; amber, turbid, alkaline, urea .6 per cent.; trace of albumin; no sugar; no casts; no red blood cells; few pus corpuscles.

Report April 1, 1904: Wound has remained permanently healed. Has occasional pains in the bladder. Holds urine during the day about four hours and during the night the same length of time. Has perfect control of urine. Has used catheter four times since operation, but not of late. Sexual function lost. General health good.

CASE 30.—Mr. S. W., aged 75 years. Occupation, farmer. Admitted to Mercy Hospital April 23, 1903.

Present Illness.—Began one and a half years ago with increased frequency of urination, accompanied by great pain and burning. Has used catheter daily for past fifteen months. Urinary examination: quantity in twenty-four hours, 1020 c.c., sp. gravity 1010; acid, amber, cloudy, urea 1.6 per cent., some albumin, no casts, few squamous epithelial cells, numerous pus cells, no red blood corpuscles.

Operation.—April 25, 1903: Regular technic. Two stones were removed from bladder. Patient discharged from hospital June 13.

August 4, 1903: A small urethral fistula is present in the perineum. He has complete control of the urine and retains it about three hours during the day and four hours during the night. Sexual function is same as before operation, but he has not been very active in this respect for a number of years past.

CASE 31.—Mr. J. S., aged 55 years. Occupation, cigar maker. Admitted to Mercy Hospital May 23, 1903.

Present Illness.—Began about eighteen months ago with painful urination. Frequency of urination increased gradually and the pain and burning became more severe. At the present time he is compelled to pass his urine every hour or hour and a half, and the pain attending the act is very severe. Pain is located at the neck of the bladder and in the rectum. Symptoms are aggravated by being on his feet. Quantity of urine passed each time is small. General health fair.

Examination.—Prostate is enlarged and hard. Thompson searcher reveals the presence of a calculus. Examination of urine: urea 2.8 per cent., albumin present, no casts, abundant pus cells.

Operation.—May 25, 1903: Regular technic. One large stone removed. He left the hospital July 5, 1903.

March 29, 1904: Wound has remained permanently healed. No pain at any time. Holds urine during day from three to four hours and at night for five to six hours. Urinary control perfect. Has not used catheter since operation. Sexual function impaired. General health excellent.

CASE 32.—Mr. W. W. McK., aged 65 years. Occupation, farmer. Admitted to Mercy Hospital June 24, 1903.

Present Illness.—Began about four years ago with increased frequency of urination. This persisted and became more severe until about one year ago, when he began to use the catheter. Since then has used catheter every six hours.

Examination.—Prostate enlarged and hard. Urinary analysis: urea, 2 per cent.; a trace of albumin; no casts; pus abundant.

Operation.—June 29, 1903: Regular technic. Patient left hospital July 29 with wound entirely healed.

Report April 5, 1904: Wound has remained permanently healed. Has some bearing down pain in bladder when he urinates. Holds urine during the day from one to two hours and at night from two to three hours. Has perfect control of the urine. For past five weeks patient has used catheter once every evening. This enables him to sleep most of the night. Sexual function impaired. General health fair, but for several months past he has been troubled with pain in the left leg and thigh.

CASE 33.—Mr. L. H., aged 62 years. Occupation, farmer. Admitted to Mercy Hospital July 6, 1903. Family and personal history negative.

Present Illness.—Began about three and one-half years ago with difficult, painful urination. Symptoms continued until he began catheter life three years ago. Has used catheter daily since then.

Examination.—Bladder distended above symphysis. Prostate much enlarged. Urine: alkaline, sp. gr. 1016, turbid, urea 2.2 per cent. Trace of albumin, no sugar, few granular casts and moderate amount of pus.

Operation.—July 8, 1903: Regular technic. Considerable hemorrhage from bladder followed operation until July 17. Calcium chlorid and gelatin solution administered. Patient left hospital Aug. 4, 1904. On this date the urine had all been passed through the urethra for three days and he was able to retain it in the bladder about one hour at a time.

Report March 29, 1904: Wound has remained permanently healed. Has occasional burning pain in the wound, not severe. Holds urine during the day from two and a half to three hours and at night four or five hours. Has perfect control of the urine. Has not used catheter since operation. Sexual function lost. General health excellent.

CASE 34.—Mr. B. B. L., aged 62 years. Occupation, traveling salesman. Admitted to Mercy Hospital July 9, 1903. Family and personal history negative.

Present Illness.—About 9 months ago began to suffer from difficult and painful urination. Could not completely empty bladder, but passed urine every half hour. Also has had pain in right side of pelvis and hip. Since onset has had attacks of chills and fever with increase in severity of the bladder trouble.

Examination.—Patient emaciated, anemic and in extremely poor condition. Bladder distended above symphysis. Prostate moderately enlarged. Urine: acid, 1007, turbid, urea 1.4 per cent., trace of albumin, many pus cells.

Operation.—July 18, 1903: Regular technic. Because of septic condition of bladder tube was allowed to remain until July 27. Patient left hospital Sept. 14, 1903, with wound not quite healed. This patient recently died of some intercurrent disease.

CASE 35.—Mr. C. G. E., aged 63 years. Merchant. Admitted to Mercy Hospital Aug. 29, 1903. Family history negative.

Previous History.—Had an attack of renal colic on right side five years ago.

Present Illness.—Since two years ago has complained of frequent and painful urination. Tenesmus in bladder has been specially severe. Five weeks ago suffered from acute retention of urine, with temperature of 102. Attack lasted two weeks and he was catheterized several times.

Examination.—Prostate very much enlarged. Sound reveals presence of stone in the bladder. Urine: yellow, turbid, 1012, urea 1.7 per cent., trace of albumin, moderate number of pus cells.

Operation.—Sept. 2, 1903: Regular technic. Convalescence normal, except for slight epididymitis, which subsided without suppuration. Patient discharged from hospital September 22. On that date perineal wound had entirely closed and control of the bladder was good.

Feb. 10, 1904: Wound permanently closed. No pain. Holds urine during day from two to three hours and at night from six to seven hours. Has perfect control of urine. Sexual function slightly impaired. General health "better than for ten years."

CASE 36.—Rev. F. A., aged 67 years. Admitted to Mercy Hospital Sept. 3, 1903. Family and previous history negative.

Present Illness.—Three years ago began to suffer from increased frequency of urination. Trouble has increased in severity since then and he now urinates five or six times at night and every two hours during the day. Some pain during urination. Catheterized for the first time yesterday.

Examination.—Prostate considerably enlarged and hard. Stone found in bladder. Urine: dark red, cloudy, acid, urea 1.2 per cent., albumin plus, many red blood cells (result of sounding). Temperature from September 3 to 9, 98.6 to 101.6.

Operation.—Sept. 9, 1903: Regular technic. Convalescence normal. Perineal wound closed October 30 and he left the hospital October 31.

March 29, 1904: Wound has remained permanently healed. Has no pain at any time. Holds urine during day for three hours and at night the same length of time. Has perfect control of urine. Has not used catheter since operation. General health excellent.

CASE 37.—Mr. C. S., aged 64 years. Farmer. Admitted to Mercy Hospital Sept. 11, 1903. Family and previous history negative.

Present Illness.—Began about five years ago with increased frequency of urination. Trouble has grown worse and now he passes urine every two or three hours during the day and four or five times at night. For past six months has had burning pain along urethra and tenesmus.

Examination.—Prostate moderately enlarged. Temperature 100 F. Urine: yellow, turbid, 1031, acid, urea 2.4 per cent., albumin plus, no casts, pus or blood.

Operation.—Sept. 12, 1903: Regular technic. Convalescence normal until October 10, when he developed a pneumonia, which lasted about two weeks. Patient left the hospital October 24. At this time wound was not quite closed, though he passed nearly all of the urine through the anterior urethra, and control of the bladder was good.

Feb. 10, 1904: Wound has broken open occasionally since he left the hospital, discharging some urine during micturition. Has had only very slight pain at times. Holds urine during day about two hours; when active and on his feet not quite so long. Gets up two or three times at night to urinate. Urinary control is perfect when he is quiet, but there is slight leakage when on his feet for long at a time. General health good, weight normal. Sexual function impaired.

CASE 38.—Mr. A. P. H., aged 54 years. Farmer. Admitted to Mercy Hospital Sept. 9, 1903.

Family and personal history negative.

Present Illness.—Has had symptoms of prostatic hypertrophy for five years. At present urinates every hour during the day and five or six times at night.

Examination.—Moderate enlargement of prostate. Urine: Yellow, turbid, alkaline, 1014, urea 1.3 per cent., no albumin, no casts, pus or blood.

Operation.—Sept. 12, 1903: Regular technic. Convalescence uninterrupted, except for a double epididymitis, which developed October 3. Subsided without suppuration. Patient left hospital October 17, with excellent control of bladder but wound not quite healed. Held urine two hours during the day and about the same length of time at night.

Feb. 10, 1904: Wound permanently closed. No pain. Holds urine during day four hours when quiet, and three hours when on his feet. Holds it at night for five hours. Sexual function impaired. General health excellent. Weight at maximum.

CASE 39.—Mr. M. K., age 63 years. Laborer. Admitted to Cook County Hospital Sept. 17, 1903.

Family and previous history negative.

Present Illness.—Has had symptoms of prostatic hypertrophy for several years past. Of late has been obliged to urinate every hour or two during the day and five or six times at night. Has not used the catheter.

Examination.—Prostate markedly enlarged. Urine: yellow, clear, acid, 1013, no albumin, no pus or blood.

Operation.—Sept. 18, 1903: Perineal prostatectomy performed by Dr. G. E. Goodfellow of San Francisco, assisted by Dr. J. B. Murphy. The prostate was removed piecemeal, with fingers and forceps, through a one-inch median incision. Wound left open without suture.

November 27: A small sinus persists in the perineum and there is some leakage through it when urine is passed. Urinary control is excellent and he is able to hold the urine two to three hours at a time.

We have not been able to trace patient since last report.

CASE 40.—Mr. J. S., aged 78 years. Laborer. Admitted to Cook County Hospital Sept. 17, 1903.

Family and previous history negative.

Present Illness.—For the past two or three years patient has had to evacuate bladder five or six times every night, and has suffered greatly from tenesmus and pain in bladder during micturition. General health very poor.

Examination.—Prostate very much enlarged and firm.

Operation.—Sept. 18, 1903: Regular technic. Uninterrupted convalescence. Patient left hospital October 19 with wound entirely closed. Could retain urine in bladder for two or three hours at a time. Control good except that occasionally there was some leakage between urinations.

We have not been able to trace patient since last report.

CASE 41.—Mr. J. M. H. aged 63 years. Undertaker. Admitted to Mercy Hospital Sept. 18, 1903.

Family History.—Father died of tuberculosis.

Previous History.—Negative.

Present Illness.—Has suffered from symptoms of prostatic hypertrophy for about two years. At present has to urinate seven or eight times during the day, but only once or twice at night. Developed an acute retention of urine five days ago and has used the catheter several times a day since then.

Examination.—Poorly nourished and anemic. Prostate moderately enlarged.

Operation.—Sept. 19, 1903: Regular technic. Tube removed from bladder September 21 and patient sat up in chair for first time September 25. On September 29 examination of the wound showed the presence of some fecal discharge from it. September 30 there was a considerable amount of blood lost from the wound as a result of the sloughing process in the anterior rectal wall. On October 2 patient passed clots of blood with the urine through the urethra, and later in the day had a second rather profuse hemorrhage from the wound. Calcium chlorid gr. 10 and adrenalin chlorid solution mm. 5, given every two hours. Hemorrhage stopped entirely October 7 and the medicine was discontinued. On October 5 he developed a right-sided epididymitis, which subsided without suppuration. Patient left the hospital Nov. 9, 1903 with the perineal wound not entirely healed and a small recto-urethral sinus still present. At the time of his discharge vesical control was good and he was able to retain urine in bladder from one-half to one hour at a time. Most of the urine escaped, during urination, into the rectum and through the perineal wound.

Report April 1, 1904: Wound has remained permanently healed. Has no pain. Holds urine during night from two to four hours, but not quite so long during the day when he is on his feet. Sexual function impaired. Patient states that about half of the urine is passed through the urethra and the balance into rectum, through the small urethra-rectal sinus, which has persisted. Has gained 26 pounds since he left the hospital and general health is good. The urethro-rectal fistula was operated on May 7, 1904, in the following manner: The entire fistulous tract was dissected out and the openings in rectum and urethra closed by inverting the edges of the wounds and approximating them with several layers of interrupted catgut sutures. The perineum was then repaired with

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deep buried catgut sutures and the bladder drained through a permanent catheter. Patient left the hospital May 24 with the urethro-rectal fistula entirely closed and nearly all of the urine coming through the anterior urethra. Control of urine was perfect and only a few drops escaped through the perineal wound during micturition.

CASE 42.—Mr. C. L., aged 67 years. Carpenter. Admitted to Mercy Hospital Sept 26, 1903.

Family History.—Mother died of "consumption."

Previous History.—Negative.

Present Illness.—Has suffered from enlarged prostate the past two years. Developed an acute retention of urine eleven days ago, and since then has used the catheter three or four times daily up to four days ago.

Examination.—Prostate slightly enlarged, but very hard and firm. Urinalysis: alkaline, yellow, 1027, urea 2.7 per cent., no albumin, pus or blood.

Operation.—Sept. 30, 1903: Regular technic, except that the operation was done through a single incision to the left of the perineal raphe. Convalescence uninterrupted, except for an epididymitis on the right side, which subsided without suppuration. Patient left the hospital Oct. 25, 1903, with the wound closed and vesical control practically normal. At that time he was able to hold the urine in the bladder from two to three hours.

March 29, 1904: Wound has remained closed since operation. Suffers considerably from pain in bladder and urethra. Holds urine in bladder during the day for from three to four hours and at night for about six hours. Has used the catheter to empty the bladder three or four times a day, since a month after he left the hospital, except for a week or two at a time. The reason for using catheter was beause of pain when bladder became distended. General health not good.

CASE 43.—Mr. C. B., aged 72 years. Farmer. Admitted to Mercy Hospital Oct. 5, 1903.

Family History.—One brother died of pulmonary tuberculosis.

Previous History.—Negative.

Present Illness.—For past seven or eight months has complained of increased frequency of urination. At present has to pass urine about every half-hour and suffers much from tenesmus in the bladder. Urine often contains blood.

Examination.—Poorly nourished man. Prostate moderately enlarged. Urinalysis: yellow, acid, 1008, urea 2 per cent., albumin plus, much pus and a few red cells. The catheter passed into the bladder immediately after urination drew off 41 ounces of turbid urine. Afternoon temperature on October 6, 102 degrees.

Operation.—Oct. 7, 1903: Single incision to left of raphe used. Temperature reached normal October 15 and convalescence was uninterrupted. Patient left hospital November 16 with excellent control of the urine, but some slight leakage through perineal wound during urination. Was able to retain urine in bladder for two to two and a half hours during day and a longer time at night. Occasionally there was slight leakage through perineal wound between urinations.

A week after patient went home he developed a severe nephritis and died, evidently, from uremia, five days later.

CASE 44.—Mr. S. C., aged 67 years. Merchant. Admitted to Mercy Hospital Sept. 28, 1903.

Family History.—Negative.

Previous History.—"Inflammation of the bowels," 40 years ago.

Present Illness.—Has had a moderate degree of urinary incontinence for several years. Fourteen months ago began to have severe pain in the bladder, when it was distended and tenesmus occurred when urine was passed. Symptoms have continued until now he urinates every half to three-quarters of an hour and has very little control of the bladder.

Examination.—Prostate moderately and uniformly enlarged. Arteries extremely calcareous. Sound passed into bladder and stone found. Urinalysis: alkaline, 1012, turbid, urea 1.7 per cent., albumin present.

Because of the severe symptoms from which this patient was suffering, the rapidly increasing weakness which was clearly the result of the pain in the bladder and frequent urination, and especially because of the small quantity of urine which was being passed in twenty-four hours, also due to the obstruction in the neck of the bladder and the stone in the bladder cavity, immediate operation was considered positively indicated.

Operation.—Oct. 10, 1903: Perineal prostatectomy through single incision to left of median line. Calculus removed after the lateral and middle lobes. After operation temperature was 98.4 degrees, pulse 68 and respirations 32. That night patient was delirious and constantly tried to get out of bed. Toward morning he became weak and stupid; temperature 100 degrees, pulse 114 and respirations 32. October 11, 9 a. m., pulse could not be felt at the wrist, respirations were short and shallow and he did not respond to the saline enemas which were given. At 5 o'clock in the afternoon patient was in a deep stupor, temperature was 102 degrees and respirations 48. He died at 6:30 p. m. The prostate would not have been removed in this case had it not been for the urgency of the symptoms produced by the calculus.

CASE 45.—Mr. E. J. H., aged 73 years. Merchant. Admitted to Mercy Hospital Oct. 16, 1903.

Family and Previous History.—Negative.

Present Illness.—Has had symptoms of prostatic enlargement for past three years. For the past nine months he has catheterized himself six or seven times every day. Last March had a peri-urethral abscess which ruptured into the urethra.

Examination.—Prostate enormously enlarged. Urinalysis: acid, specific gravity 1020, cloudy, urea 1.1 per cent., albumin plus, few red cells and many pus cells

Operation.—Oct. 24, 1903: Regular technic through the inverted Y incision. Convalescence uninterrupted, except on November 27, when a small perineal abscess developed in front of the wound. Abscess was incised three days later and a small amount of urine was discharged through the opening for several days. Patient left hospital December 4, with the wound closed and urinary control excellent. Was able to hold urine in bladder for two to four hours.

Feb. 10, 1904: Perineal wound, where abscess was evacuated, reopened and has not yet entirely closed. Slight urinary discharge through the sinus when he urinates. Has very slight, if any, pain.

April 1, 1904: Small sinus remains in perineum, through which some urine and a small amount of pus are discharged during micturition. Has occasional pain in the wound after passing urine. Holds urine during the day from two to three hours and at night about the same length of time. Control of urine good. Has not used catheter since operation. Sexual function lost. General health good. Has gained strength and weight since operation.

CASE 46.—Mr. L. W., aged 62 years. Mechanic. Admitted to Mercy Hospital Nov. 28, 1903.

Family History.—Negative.

Previous History.—"Acute rheumatism" thirty years and specific urethritis eight years ago.

Present Illness.—For past four years has had frequent urination, with straining during the passage of the urine. Has used catheter for past two years, at present every three hours during the day and every hour at night. Just before coming to hospital patient had two severe attacks of tachycardia.,

Examination.—Prostate very much enlarged. Urinalysis: alkaline, turbid, 1012, trace of albumin, moderate number of pus cells. On day of admission had severe tachycardia, during which pulse numbered 164 per minute. Attack lasted five hours.

Operation.—Dec. 2, 1903: Regular technic, through inverted Y incision. Convalescence uninterrupted and patient left the hospital Dec. 25, 1903.

Feb. 10, 1904: Small fistula persists in perineum, through which a little urine is discharged during micturition. Retains urine in bladder for two to three hours during the day and at night about one hour. Has not used catheter since operation. General health excellent. A small abscess formed in the perineum after the patient went home. It opened spontaneously

and probably accounts for the small sinus which is now present. Sexual function impaired.

Case 47.—Mr. R. McC., aged 70 years. Farmer. Admitted to Mercy Hospital Dec. 28, 1903.,

Family History.—Negative.

Present Illness.—Has suffered from prostatic hypertrophy for the past ten years. Symptoms have gradually grown worse and now he has to urinate every two to three hours. Has had acute retention on three different occasions. Has used catheter daily for past three years.

Examination.—Prostate is enormously enlarged and situated high up. Urinalysis: acid, yellow, cloudy, 1010, urea .8 of 1 per cent., trace of albumin, a few pus cells.

Operation.—Dec. 30, 1903: Regular technic. Convalescence uneventful and patient left hospital Jan. 21, 1904. On date of discharge nearly all of the urine passed through the wound and he had but little control of bladder. A metal sound could be easily passed through anterior urethra into bladder.

April 1, 1904: Small sinus persists in perineum. Some urine is discharged through sinus when bladder is emptied. Some pain in the region of the wound, due to the irritation of the urine. Can hold urine in bladder when lying down for about two hours, but control is not good when sitting or standing. Has not used catheter since operation. Sexual function impaired, but it has not been active for years. General health good.

Case 48.—Mr. F. M. McK., aged 71 years. Merchant. Admitted to Mercy Hospital Dec. 28, 1903.

Family History.—Negative.

Previous History.—Urethritis at thirty years of age.

Present Illness.—For past twelve years has suffered from increased frequency of urination. Trouble has increased in severity and of late has had to urinate every hour at night and at intervals of one to three hours during the day. Catheter has been used at intervals since eight years ago. Six to eight ounces of residual urine is always present.

Examination.—Prostate only moderately enlarged, but very firm. Sound in bladder shows the presence of a stone. Urinalysis: acid, yellow, cloudy, 1010, trace of albumin, few red and white blood cells found.

Operation.—Dec. 30, 1903: Regular technic. After prostate was removed, the internal sphincter was dilated and a large calculus removed from bladder. The pressure of the calculus had produced an extensive ulceration on the base of the bladder and this bled profusely after the stone was extracted. Convalescence uninterrupted.

April 1, 1904: Patient can now retain the urine in the bladder for about three hours during the day and three to four hours at night. There is some leakage through a small sinus in the perineal wound, when he passes the urine at night, but none during the day. The urethral fistula persisted and a small amount of urine was discharged through it during micturition. May 23 it was closed by dissecting out the entire fistulous tract and approximating the edges of the urethral opening with several layers of interrupted catgut sutures. The perineum was then repaired by means of deep absorbable sutures and the bladder drained through a permanent catheter.

Case 49.—Mr. R. G. D., aged 56 years. Carpenter. Admitted to Mercy Hospital Jan. 23, 1904.

Family and Previous History.—Negative.

Present Illness.—Has complained of gradually increasing frequency of urination for the past six years. Has used catheter daily since eight months ago. At present draws the urine every three or four hours during the day.

Examination.—Moderate enlargement of prostate. Urinalysis: acid, yellow, turbid, 1012, urea 1.6 per cent., no albumin, a few pus cells.

Operation.—Jan. 28, 1904: Regular technic. Convalescence uninterrupted except that urine was passed through the perineal wound longer than is usually the case. On March 2 a sound was passed into the bladder through the anterior urethra and this was repeated March 8. After that date most of the urine was passed through the anterior urethra and he was able to retain it in the bladder for one to two hours. Had slight double epididymitis March 14, which subsided without suppuration. Patient left the hospital March 19, at which time he was able to retain the urine for two to three hours at a time. A very small sinus was present in the perineum, but only a few drops of urine escaped from it during urination.

Case 50.—Dr. J. H. W., aged 63 years. Occupation, physician. Admitted to Mercy Hospital Jan. 31, 1904.

Family and Previous History.—Negative.

Present Illness.—Twelve years ago had proctitis, with some bladder irritation. Hemorrhoids developed and were operated on. Has suffered from increased frequency of urination for five years and for past three years has had to pass urine every hour during night. Much pain and tenesmus. Has not used catheter habitually.

Examination.—Emaciated, anemic and slightly cyanotic. Arteries sclerotic. Prostate moderately enlarged. Stone found in bladder. Urinalysis: acid, turbid, urea 1.4 per cent. Albumin plus. Many red blood cells and large numbers of pus cells.

Operation.—Feb. 3, 1904: Regular technic. Lateral and middle lobes and calculus removed. Convalescence uneventful. Patient left hospital February 21, with wound almost entirely closed and all of the urine coming through the anterior urethra. Retained urine in bladder for three hours at a time and voided it voluntarily.

April 6, 1904: Wound has remained permanently healed. Has had complete control of the urine since five weeks after the operation. Holds urine from three to four hours during the day and from seven to eight hours at night. General health excellent. Has gained thirty pounds in weight since the operation.

Case 51.—Mr. S. G., aged 70 years. Admitted to Mercy Hospital Feb 26, 1904.

Family and Previous History.—Negative.

Present Illness.—For the past five months has noticed frequency of urination, which has increased until at the present time he must pass the urine about every half-hour. Since five months ago he has had to be catheterized regularly every day.

Examination.—Prostate moderately enlarged and firm, situated high up. Urinalysis: alkaline, yellow, turbid, 1016, urea 1.7 per cent, albumin present. A few red blood cells and small amount of pus present.

Operation.—Feb. 27, 1904: Suprapubic prostatectomy performed, after Freyer's method, described by Mr. Moynihan (in the *Annals of Surgery*, January, 1904). The entire prostate and prostatic urethra were removed and a permanent catheter inserted through the urethra into the bladder. Convalescence uninterrupted. Catheter removed March 7.

At present time (April 2, 1904), there is still a small suprapubic sinus, which discharges some urine when he is on his feet, but hardly any when he is lying down. Holds urine in bladder for about three hours at a time during the day and has to get up only three times during the night to urinate. Control of the bladder is perfect. There is some infiltration in the cellular tissue to the left of the bladder and a slight evening elevation of temperature. His reaction is slow and he is still feeble six weeks after operation.

I desire to thank Dr. James M. Neff for his careful record of the subsequent courses of the cases.

ROENTGEN RAY TREATMENT OF LEUKEMIA.

REPORT OF CASE (MYELOGENOUS TYPE) WITH APPARENT IMPROVEMENT; DEATH; AUTOPSY.

LAWRENCE C. GROSH, M.D.,
AND
WILLARD J. STONE, B.Sc., M.D.
TOLEDO, OHIO.

In August, 1903, Senn[1] reported the apparent cure of a case of myelogenous leukemia under the influence of the Röntgen ray. This form of treatment was instituted after failure to better the patient's condition by the drugs usually tried in this disease and when the case ap-

1. N. Senn: N. Y. Medical Record, Aug. 22, 1903.

peared hopeless. The blood findings in Senn's case are not reported as fully as might be desired, but there can be little doubt that the patient's condition was markedly bettered under the influence of the treatment. This was evidenced by the diminution in volume of the spleen, together with a decrease proportionately of myelocytes in the peripheral blood and a return of the polymorphonuclear elements to nearly the normal proportion.

Senn[2] has also reported a case of lymphatic leukemia benefited under *x*-ray treatment. This case, together with an undoubted case of pseudoleukemia, judging from the clinical and blood findings, was reported under the title, "X-Ray Treatment of Pseudoleukemia." The blood findings in one of these two cases undoubtedly make it, however, one of lymphatic leukemia instead of Hodgkin's disease; i. e., 208,000 leucocytes per cubic millimeter, of which 78.75 per cent. were small lymphocytes and 14.25 per cent. large mononuclear lymphocytes.

In a recent letter (March 20) to the writers, Senn states "that the two cases of pseudoleukemia [see review above] are well and that the case of myelosplenic leukemia that made such an excellent recovery has returned with a moderate relapse and is again under *x*-ray treatment."

Herman Grad[3] reports a case of leukemia treated by the *x*-ray. Conclusions as to the type of disease treated by him are difficult, since he merely says "the case was carefully diagnosticated in one of our large hospitals," but fails to give the blood findings. He says "a blood examination revealed the true condition," and then fails to say what it was, whether lymphatic or myelogenous leukemia or Hodgkin's disease (greatly enlarged glands in neck, axillæ and groin associated with a very large spleen). Judging from the indefinite description probably it was lymphatic leukemia. He mentions that after some twenty-five or thirty *x*-ray exposures the percussion area of the spleen became considerably reduced and that a diminution in size of the glandular enlargements was apparent. He does not give the outcome of the case.

E. J. Brown[4] reports a case of myelogenous leukemia symptomatically cured by the *x*-ray. The blood examination on beginning treatment showed reds, 2,600,000; whites, 800,000 (polymorphonuclears 40 per cent., myelocytes 40 per cent., eosinophiles 8 per cent.); hemoglobin, 65. The spleen extended from the seventh rib in midaxillary line to two fingers' breadth below the navel in the left mammary line; to the right it extended one finger's breadth beyond the median line. Treatment consisted in the use of arsenic and iron internally and *x*-ray applications to the splenic region twice weekly. After two months the leucocytes numbered 58,000. The *x*-ray applications were from this time on given daily to the splenic region, the ends of the long bones and over the sternum; the iron and arsenic discontinued. Two months later the leucocytes numbered 129,000 (polymorphonuclears 60 per cent., myelocytes 25 per cent., eosinophiles 5 per cent.) The blood formula showed a constantly decreasing number of leucocytes one month later, the myelocytes also relatively decreasing with reduction in size of the spleen (leucocytes, 44,360; polymorphonuclears, 74 per cent.; myelocytes, 20 per cent.). Two months later the leucocytes numbered 7,894; reds. 4,690,000; hemoglobin, 95; the weight of the patient having returned to normal or above, the albumin present in the urine during the period of observation having disappeared and the patient's general condition good.

During the treatment an *x*-ray dermatitis developed once or twice over the splenic region, the outer layers of the skin desquamating, but leaving no bad results. The hair and pigment disappeared also from the parts exposed. The change in the blood formula, reduction in size of the spleen and the desquamative dermatitis were not accompanied by toxemic symptoms, rise of temperature, etc., as was noticed in Senn's case and ascribed by him to the absorption of broken-down cellular constituents of spleen and blood. As George Dock[5] has suggested, it would seem that perhaps the question of an accidental infection should enter into a consideration of the intoxication noted in this case.

The report of Brown's case brings out the important fact that progressive reduction in the number of leucocytes with relative decrease, to absence, of myelocytic elements took place after the iron and arsenic had been discontinued and that this reduction progressed to what may be considered a normal blood formula after seven and one-half months' treatment.

HISTORY OF PRESENT CASE.

L. M., male, aged 44, bricklayer. Came under Dr. Grosh's treatment in June, 1903. Father died at age of 75 after two weeks' illness, exposure to cold. Mother alive, aged 84. Three brothers and two sisters are well. One sister died of typhoid.

Previous History.—Patient was well as a boy; took alcohol in excess and until three years ago, at which time he had typhoid fever; sick in bed three weeks with a long convalescence.

Figure 1.

Figure 2.

After this illness drank a large amount of beer for a month, which caused a long siege of diarrhea. Has been "bloated" ever since the diarrhea started. His present illness began in June, 1902, with severe backache, which caused him to stop work; the diarrhea began again, which, it will be noted, has appeared from time to time since the typhoid infection. Ankles never swollen; rheumatism(?); lues negative; never had malaria; appetite has always been good. Complains of shortness of breath for past few days and weakness.

Status Præsens.—Patient 5 feet 11 inches, large frame, musculature wasted (did weigh 180, now 173), panniculus thin, skin sallow. Brown pigmentation over neck, chest and in axillæ. Axillary glands enlarged to size of filbert. No edema of lower extremities. Chest is long, with good angle; supraclavicular and infraclavicular spaces depressed; seventh, eighth, ninth and tenth ribs on left side bulging. Expansion fair. Lower boundary left lung not very movable where bulging occurs. Relative dullness over supraclavicular and infraclavicular spaces, right side. Increased pitch over left supraclavicular. Lower lung border sixth rib, nipple line, right side. Bronchial breathing, with fine râles over both apices (bronchitis (?), and roughened vesicular breathing over right middle and lower lobes (behind and in front). Pulse 84; irregular, low tension, small and dicrotic. Temperature 101.

Heart: Apex in fifth intercostal space just internal to nip-

2. N. Senn: N. Y. Medical Journal, April 25, 1903.
3. H. Grad: Jour. Adv. Therapeut., Jan., 1904. p. 20.
4. E. J. Brown: THE JOURNAL A. M. A., March 26, 1904.
5. Jour. Amer. Med. Sciences, April, 1904.

ple line; no thrill or precordial bulging. Dullness on the right extends to midsternum. Auscultation reveals an accentuated second pulmonic sound.

Abdomen: Prominent, tense and tympanitic. Liver can be felt below costal border, sharp edge. Spleen enormously enlarged, notched edge, firm consistency; extends from about seventh rib, midaxillary line, to navel on the right and nearly to symphysis pubis. No free fluid detected in abdominal cavity. (See Figure 1.)

Urine: Negative; about 4,500 c.c. in 24 hours.

Blood: Does not flow readily; yellowish-red in color. Hemoglobin (Fleischl-Miescher 45 per cent.). Unstained slide shows great increase of white cells; reds, 2,160,000; whites, 960,000; color index 1.0+. Stained preparation shows many myelocytes, normoblasts and basophiles.

Diagnosis.—Myelogenous leukemia.

Treatment.—Arsenic.

COMMENT.

Urine.—The patient has passed throughout the period of observation from 3,500 to 4,000 c.c. daily. Specific gravity 1,013 to 1,023. No serum-albumin or sugar detected. On standing urine deposits large amount of amorphous urates. In November, 1903 (after five months on arsenic and mercury), at which time the leucocytes numbered 175,000, the uric acid present was 1.10 g. per 1,000 c.c. (figuring on 3,500 c.c. daily gives 3.85 g. uric acid per day), an increase above normal of about 550 per cent. In January nucleo-albumin present in urine; uric acid, 0.94 g. per 1,000 c.c., an increase above normal of about 470 per cent. In February nucleo-albumin present at intervals. Uric acid, 0.80 g. per 1,000 c.c.; increase of 400 per cent. above normal.

This corresponds with the usual observations in leukemia. During the period when arsenic and mercury are used and when the leucocytes are decreasing relatively in numbers increased uric acid elimination occurs. The arsenic, mercury, etc., seem, however, to sooner or later reach the limit of their therapeutic efficacy and the leucocytes again increase, associated with a decrease in the uric acid elimination as noticed above. Fränkel has shown that increased uric acid elimination coincides with the evident resorption of the splenic tumor in leukemia under the influence of the drugs named above, the increase of uric acid being undoubtedly due to the breaking down of the leucocytes under influence of the treatment. This would seem to be a point in favor of the view of Ehrlich, that the spleen plays but a passive part in myelogenous leukemia, i. e., that its enlargement, as well as that of the liver, is merely due to leucocytic infiltration. Numerous examinations for Bence-Jones bodies (albumosuria) were made, with negative results.

Blood.—Table 1 shows the average blood formula for the months June, 1903, to March, 1904, under arsenic, mercury and sodium cacodylate treatment. These differential counts were made uniformly by the eosin-methylene blue (May-Grünwald) combination of Grübler, so that the averages taken during these months may be considered constant, the same stain having been used in all. The highest leucocyte count was 960,000 per cm. in June, the first month under observation, and ranged between that number and 135,000 in December.

The polymorphonuclears of all kinds ranged from 41.2 per cent. in February, 1904, the month before *x*-ray treatment was begun, to 54.6 per cent. in August, 1903. The myelocytes, all kinds, including Cornil-Müller cells, ranged from 27.9 per cent. in July, 1903, to 52 per cent. in February, 1904; an almost exact reversal in the formula, the myelocytic elements increasing as the disease process became more chronic and after the effect of the arsenic treatment had ceased to be of service. It was also noted that as the disease became more advanced the color index more nearly approached 1.0—corresponding to the index of an anemia of the pernicious type. This was considered mere evidence of the coincident effect of the chronic disease process on the red cells and their hemoglobin content, i. e., January and February color index 1.10 and 1.30 respectively. The increase of myelocytic elements seemed to be coincident with a relapse which the patient developed in February (heart insufficiency, dyspnea and weakness), and which reacted well to inf. digitalis and strychnia.

The eosinophiles of all kinds ranged from 8.5 per cent. to 2.5 per cent., the last month before *x*-ray treatment was begun.

Some interesting facts are shown in the table. The large per cent. increase in degenerate forms, which appeared in July, 1903, one month after arsenic medication, 12.7 per cent. These degenerates never reached such a high percentage later in the course. Also, at the time of the relapse in February, the marked increase in myeloid cells, from 4.5 per cent. in September and October to 14.8 per cent.

The iodin reaction was obtained several times. The granules seeming to be confined to the eosinophile myelocytes. An effort was also made to ascertain the nature of the degenerative process present in the forms classed as "degenerate" in the charts. By staining with Sudan

TABLE 1.

Bronze X-Ray Treatment.	Average per cent. June, 1903	Average per cent. July	Average per cent. Aug.	Average per cent. Sept.	Average per cent. Oct.	Average per cent. Nov.	Average per cent. Dec.	Average per cent. Jan.	Average per cent. Feb.
Polymorph. neutrophiles	51.7	47.5	49.2	39.0	35.5	47.0	40.0	47.5	37.5
Polymorph. eosinophiles	1.5	1.9	4.0	6.5	4.0	2.5	2.0	2.0	.9
Polymorph. basophiles	1.0	1.5	1.4	5.0	3.5	.9	2.4	1.5	2.8
	54.2	50.9	54.6	50.5	43.0	51.3	44.4	51.0	41.2
Myelocytes neutrophiles	30.2	24.0	25.3	27.5	33.5	31.2	32.4	36.0	35.5
Myelocytes eosinophiles	2.1	3.4	....	2.0	.5	1.4	1.2	.5	1.7
Myelolds (Cornil-Müller)	1.8	1.5	1.4	4.5	3.7	4.4	1.5	14.5	
	34.1	27.9	26.7	34.0	38.5	36.3	38.0	33.0	52.0
Lymphocytes	7.0	3.4	2.6	3.0	5.5	.9	2.0	2.5	1.0
Transitionals	3.3	3.9	1.4	7.0	7.0	3.7	6.8	4.0	2.1
Large mononuclears	.6	.3	1.4	4.0	1.5	1.8	2.8	1.5	2.3
Degenerates	.3	12.7	1.4	1.5	2.0	5.1	3.2	2.0	1.7
Normoblasts	.3	.5	2.0	....	2.5	.4	2.8	1.0	.4
Total eosinophilia	3.6	4.3	4.0	8.5	4.5	4.2	3.2	2.5	2.6
Reds	2,600,000	2,600,000	.....	.....	.....	.....	.....	2,600,000	2,464,000
Whites	960,000	620,000	.....	.....	.....	175,000	135,000	211,000	288,230
Hemoglobin	45 %	34 %	.....	.....	.....	70 %	60 %	60 %	65 %
Color index	.8+	.8+	.....	.....	.....	.....	.....	1.1	1.3

III and controlling with acetic acid, fatty degeneration of the degenerate myelocytes were noted in many instances. This glycogenic (or amyloid) and fatty degeneration will be made the subject of a subsequent report.

History of Case After Treatment with Roentgen Ray.—The treatment was begun February 24 through the kindness of Dr. O. T. Scarr, and consisted of applications, a medium hard vacuum tube being used, distance 6 to 8 inches, for five minutes each over sternum, spleen and over the epiphyseal junctions of the long bones every day. The patient was taking internally three times daily during the treatment:

R.	Ac. hydrochlor. dil.	℥ss
	Tr. ferri chlor.	℥ss
	Hydrarg. chlor. corros.	gr. 1/60
	Aq. cinnamoni	℥viij
	Syr. zingiberis	℥j
	Glycerini	℥j

The blood count on the day treatment was begun was 282,000; urine, daily amount about 2,000 c.c. (uric acid 0.75 gm. per 1,000 c.c., an increase of 300 per cent). The spleen extended from the seventh interspinal space in the left midaxillary line forward one finger's breadth to right of navel in median line and about one hand's breadth below it and to the left, the dull area extending from the navel leftward to the lumbar dullness behind. The liver extended from the fifth intercostal space, right nipple line (seventh rib in midaxillary line), to about two fingers' breadth below costal border. The spleen and liver were soft to palpation. The heart was slightly enlarged to the right (left parasternal absolute dullness). Apex beat in fifth space slightly to left of and below the nipple. On auscultation a soft, systolic blowing murmur running into and partially replacing the diastolic sound, over apex and transmitted into axilla. This murmur was loud over the base and of the same character; second pulmonic not accentuated. This murmur was considered by us as of hemic plus myocardial origin; the myocardial element arising from the patient's lowered nutrition due to the anæmia and the probability of leucocytic myocardial infiltration participated in by the other organs. The lungs gave slightly increased resonance on both sides and on auscultation slightly prolonged interrupted aspiration over the right apex. Apex not retracted. The patient had at different times complained of cough, and the temperature had varied between 99.6 and 100 or 101 degrees during the greater part of the period of observation. Numerous examinations of the sputa failed to show tubercle bacilli. Friction rubs had from time to time been detected over the splenic and hepatic areas associated with pain in these regions. The friction rubs were considered due to perisplenitis and perihepatitis.

March 10. Leucocytes 82,000. (See Table 2.)

March 18. Leucocytes 14,916. (See Table 2.)

March 20. Patient has had 20 treatments. A general rash has developed, more marked over chest, abdomen, face and left hand. It resembles an erythema multiforme. Skin over hands and face darker in color, dusky. Spleen somewhat smaller, about on level with navel and reaching to it in median line. X-ray treatments stopped.

March 23. Leucocytes 11,400.

March 26. Leucocytes 11,200. Spleen somewhat smaller, on level with navel, but not extending so far to right at costal border. The spleen is harder than before treatments were begun. Patient feels well; appetite better than at any time since the relapse in February. The darkened areas over face, neck, chest and abdomen seem to be darker than before. Few blisters over splenic area size of a quarter, which have ruptured. Skin pink underneath; no destruction of dermis. The epidermis is being shed from left hand. Small blister over right elbow. The urine has decreased to about 2,000 c.c. daily.

April 10. Leucocytes 10,600. Entire chest and abdomen raw. Exfoliation of epidermis only. Spleen somewhat smaller. General condition of patient, fair. (See Fig. 2.)

This report was originally intended to be a preliminary one, i. e., as showing the reduction from 506,200 to 10,600 leucocytes per c.mm., and the decrease from 52.0 per cent. to 2.0 per cent. of myelocytic elements, together with a seemingly apparent improvement in the general condition of the patient under the influence of twenty *x*-ray applications.

During the time the article was in the hands of the editor, the patient rather suddenly, i. e., within a few days, began to fail in strength, and died from general asthenia. The superficial burns on abdomen and elbow caused by the rays were healing nicely. No evidence of an intoxication caused by the rays, such as rise of temperature, acro-albuminuria, etc., had been noted at any time.

The autopsy showed the findings usually present in myelogenous leukemia. The spleen and liver were large, although not so large as during the earlier months of the disease, marked reduction in size having taken place under the influence of the *x*-ray treatments. Both organs cut with resistance, and were in a condition of chronic hyperplasia, the general fibrous tissue hyperplasia being very marked. No leukemic tumors were found in these or in the other organs. The heart and kidneys were enlarged and showed parenchymatous degeneration. Heart valves normal; the mitral orifice was somewhat enlarged (insufficient), due to stretching of the ring probably incident to the moderate hypertrophy and dilatation of the left ventricle. Few adherent strands over right lung apex. Red and fatty marrow of femur hyperplastic throughout; dirty grayish-red in color.

In Brown's case, cited above, treatment was begun early, before the parenchymatous organs were in a condition of chronic hyperplasia, i. e., while they were but passively enlarged from leucocytic infiltration (Pappenheim, Ehrlich). This early treatment probably had much to do with the favorable outcome of the case.

In the later stages of the disease this early passive enlargement has become an active late hypertrophy (true), due to the proliferation of the fibrous tissue elements; in reality a true fibrosis. Such was present in the case under consideration. It would seem, therefore, that the greatest good may be hoped for in those cases where the *x*-ray applications are begun early in the course, before the hyperplasia of the cellular constituents of the bone marrow becomes a chronic process; and in the case of the parenchymatous organs, spleen, liver, before the resulting fibrous tissue proliferation

TABLE 2.

After X-Ray Treatment.	Average Mar. 10.	Average Mar. 18.	Average Mar. 22.†	Average Mar. 26.	Average April 10.
Polymorph. neutrophiles	71.5	68.0	76.0	82.0	....
Polymorph. eosinophiles	6	2.0	3	1.0	....
Polymorph. basophiles	2.0	0.0	2.7	1.0	....
	73.5	70.0	80.0	84.0	....
Myelocytes neutrophiles	21.0	8.7	4.3	2.0	....
Myelocytes eosinophiles	....	1.3	....	....	....
Myelocytes (Cornil-Müller)	....	2.0	.6	....	....
	21.0	12.0	4.9	2.0	....
Lymphocytes	1.0	2.0	....	4.0	....
Transitionals	....	2.0	1.0	4.0	....
Large mononuclears	1.5	3.3	1.7	1.0	....
Degeneration	....	2.0	3.0	4.0	....
Normoblasts	1.0	....	....	....	....
Total eosinophiles	*	2.3	.3	....	....
Reds	2,267,000	....	2,918,750	....	....
Whites	82,000	14,916	17,000	11,200	10,600
Hæmoglobin	80 %	....	90 %	....	....
Color index	.7	....	.5	....	....

†X-ray treatments stopped March 20.

*Very few eosinophiles of all kinds noted one in 200 cells.

has progressed so far as to perhaps seriously interfere with the functions of the organs in question.

Since George Dock and others have stated that it is only seldom that a reduction in leucocytes is seen to below 30,000 c.mm. under arsenic and similar medication, it would seem that from the few cases so far reported, if leucocytic reduction is to be considered an evidence of improvement, the Roentgen rays certainly exert a powerful influence in that direction.

This report is submitted because of the scarcity of published cases, in the hope that other workers will soon take up investigations in this field.

ANKYLOSIS OF THE JAWS.*

G. LENOX CURTIS, M.D.
NEW YORK.

My present purpose in speaking is to report some cases of the variation in permanent ankylosis and to show plans of treatment that I have found very successful. I do this in the hope that it will be of service to others. Preparatory to the permanent cases I will refer to cases of temporary ankylosis that I regard as unique and interesting.

Temporary ankylosis, as commonly found, can be so speedily treated successfully that little new remains to be told. Nevertheless these cases sometimes cause much trouble to both patient and practitioner, when they result in serious complications, which may occur if proper treatment is not given in the early stage. See Garretson, Marshall and others for recognized methods.

The principal irritating causes of inflammation which lead to ankylosis of the jaws are exposed tooth pulps, retarded, malposed or impacted third molars, traumatism, cicatrix, tetanus, alveolar abscess, tonsillar, diphtheritic and septic injections.

Permanent ankylosis is the result of osseous formations within the joint, causing partial or complete displacement or arrest of the synovial fluid, a condition, however, that may not occur for months or years of immobility. Fortunately this is rarely met with, except in cases of rheumatoid arthritis, because of the great activity of the lower jaw its joint is usually the last to become affected. Inflammatory conditions arising from any cause should be corrected as early as possible in order to prevent cicatricial formations.

In one case of temporary ankylosis which had lasted for several days I found on examination that it seemed to be caused by an exposed pulp. This case was immediately relieved by extracting from the pulp a drop of blood and applying a dressing of camphorphenique.

The cicatricial variety follows suppurations and surgical operations through the face, such as are resorted to for the removal of tumors and necrosis of the jaws. When this condition is found in childhood and continues for a considerable length of time it is generally followed by an arrest in the development of the face and jaws. In illustration of this are the photograph (*Fig. 1*) and casts of the face and teeth of a boy, aged 16, who, when in his second year, fell from a window, fracturing his femur and also the inferior maxilla at the neck of the left condyloid process. The jaw fracture was not noticed until six months later, when the jaw was found to be ankylosed. The surgeon concluded that the trouble was due to muscular injury at the time of the fall. Thinking that in time the muscles would recover of themselves, he advised no treatment. Three years later another surgeon found the fractured jaw, but did not suggest any plan of relief. Later, indefinite different attempts were made to force the jaws apart, but were unsuccessful.

On examination, I found the ankylosis and the shortening of the jaws were due to the overlapping of the bones, which had become firmly fixed. The median line of the chin was considerably to the left. Several of the deciduous teeth which should have been cast off were present, and the mouth was in a generally disordered condition. I removed these teeth and reduced the inflammatory condition of the gums, and advised an operation for adjusting the ends of the fractured bones. I was told that several surgeons were consulted by the father, who was told that they would discourage surgical interference, consequently the boy was allowed to grow up in this unfortunate condition. My belief at that time was that the bones could be separated by means of a saw, or burr, and readjusted, and the ends of the fracture freshened and held in position until union of the bones was complete. He is now 26 years of age.

Another case of ankylosis, the cause of which is of more than usual interest, is that of a young woman who for several years had been treated for repeated granular growths in the sockets of the lower left molars that had been extracted. On examination it was found that all

Figure 1.

of the jaw, including the ramus back of the first bicuspid, was necrosed. To my amazement I found the third molar was malposed and lying at the neck of the condyloid process directly below the condyle. The treatment consisted of opening the periosteum sufficiently to permit the removal of the tooth and the necrosed bone, and treating the wound until bone was reproduced. The periosteum was retained as an interosseous splint until sufficient new bone had formed to hold the jaw in position.

By this plan there was no shortening of the jaw and no deformity of the face. It is obvious that this operation was done within the mouth. I was unable to ascertain whether ankylosis on this side of the jaw was complete or was of the temporary variety. By the use of the screw-jacks a complete and permanent use of the jaw was re-established.

I saw in consultation another case of permanent ankylosis, resulting from a surgical operation made through the face for the removal of necrosed bone in the lower jaw, that resulted from an abscess on a molar. The cicatrix was several inches in length and about an inch in width. The patient told me he had been under treatment in a hospital for more than a year, much of which time his face was bandaged. I advised resecting

* Read at the 57th Annual Session of the American Medical Association, in the Section on Stomatology, and approved for publication by the Executive Committee: Drs. E. J. Moyer, Allen B. Reeves and W. A. Wish.

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of the tears, skin induction and forcible separation of the jaw by means of screw-jacks.

I am now pleased to be able to bring before you here a patient who, at the age of 14, was brought to me in June, 1893. At the age of 6 years the patient had diphtheria with extensive ulcers in the throat, the soreness from which continued for a considerable time after the disease had subsided. During this period pain was caused in opening the mouth, when the child was permitted to take liquid food between the teeth. This method of taking nourishment became a habit. Four years later, owing to toothache, she was taken to a dentist who, finding her jaws were ankylosed, referred her to a surgeon for treatment. Various methods, including the use of the "Grady screw," to pry and keep the jaws apart, were resorted to with slight results. Precaution was not taken, however, to protect the teeth from fracture, and some were broken and abscessed;

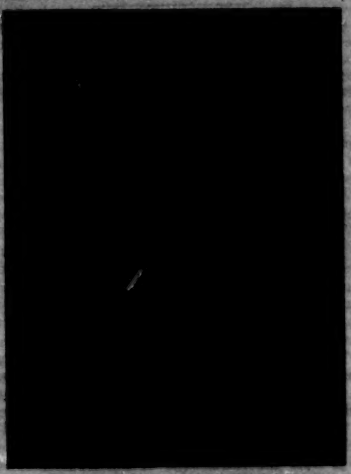

Figure 2.

gingivitis also resulted. Efforts to correct the ankylosed condition were finally abandoned and the jaws closed and became rigid. At the time the effort was made to force the teeth apart the patient was encouraged to crowd solid food between the upper and lower teeth and crush it with the tongue against the roof of the mouth. This she was finally able to do with considerable success, but in doing this she had forced the lower teeth back and the upper teeth forward, causing some deformity. Figure 1 shows a cast of a face. Examination showed the patient to be anæmic but otherwise in a fairly good state of health.

By forcing a wedge between the teeth I was able to secure one-eighth of an inch space on the left side. The reason for this was that on the left side there was only cicatricial ankylosis, while on the right side it was osseous. The condition of the mouth was deplorable. General gingivitis prevailed, and several of the permanent teeth were loose, while others were abscessed, and many of the deciduous teeth were present, thus retarding the full eruption of the permanent teeth. The crown of the upper right central was lost. By treatment much of the inflammatory condition of the gums was reduced, but not until the jaws were so far separated that the abscessed and the deciduous teeth could be extracted. My first thought was to devise and construct a mechanism that could force the jaws apart by causing an even pressure on the teeth. Figure 3 shows the depressor made of steel spring, which I was able to crowd between the jaws while the wedges were in position, and while the patient was under produced anæsthesia. While the head was firmly held by an assistant I was able to put sufficient force to the depressor to gain one-eighth of an inch space. With this space I was able to

Figure 3.

insert a flexible double screw-jack, represented by Figure 4, that I also devised for this purpose. The surface of the hand depressor and the blades of the screw-jack were serrated, the object of which was to lessen the danger of slipping. If it is necessary to further reduce this danger, soft vulcanite rubber or gutta-percha may be placed on the masticating surface of one or more of the molar teeth on either side of the mouth. The blades of his jack were made of thin spring steel. The object of this was not only to cause even bearing on the teeth, but to prevent undue pressure on the teeth and luxation of the jaws. The screws were purposely made long, so that the patient might tighten or loosen the jack at

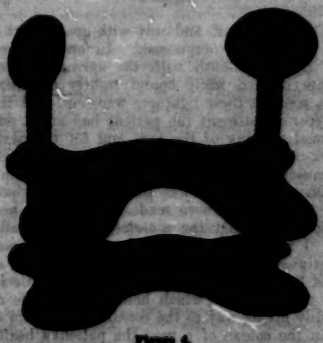

Figure 4.

will. By this simple mechanism the patient was enabled to adjust it and make as slight or as much pressure as could be easily tolerated. This patient was able to wear this jack much of the time both day and night. When three-eighths of an inch space had been secured soft wax was flowed over the blades of the screw-jack and the jack was again put in position. By this means I was able to secure an impression of the antagonizing ends of the teeth, by which casts were made and splints of vulcanite were constructed, the approximating surfaces of which were made flat, so that when in place there was an equal bearing at all points. These splints

enabled me to put greater pressure on the screw-jacks as well as eliminating all danger of fracturing the teeth. As the jaws opened, better fitting splints were applied. Chloroform was administered every few weeks and all possible pressure was made to force the jaws apart. Almost from the beginning of the treatment there was an inflammation established in the right joint. While at times this operation was attended by considerable discomfort to the patient, which prolonged the work, it had much to do with the final success, because absorption of the osseous deposit within the joint was established, and by this constant agitation it continued until a fair action in the joint was established.

One of the things which retarded our efforts was the degenerated temporal and masseter muscles because of years of disuse. These muscles required redevelopment from that condition found in a child of six years to that of a young girl of sixteen. Until this was accomplished there was but moderate benefit derived from opening and closing the mouth. In order to develop the strength of the muscles of the face, as well as to elongate them, I devised a set of springs which were securely fastened in grooves cut in the approximating surfaces of the splints on either side of the mouth. (Fig. 5.) At the forward end of the grooves there was an opening made through the splint of sufficient size to accommodate the studs A, which were one-sixteenth of an inch in thickness and one-eighth of an inch in length. The principal object of these studs was to prevent the springs from slipping out of place, and to doubly secure them they were also wired to the lower splint. These

Figure 5.

springs were very stiff, and only with great effort by the patient could be compressed. In order to get the splints into the mouth with the springs in position they were applied while bound tightly together, and when in position these ligatures were cut. At the end of one year's treatment the patient had about one-half the normal opening of the jaw, and for the next year the work of continuing the treatment was intrusted to her, because by personal illness I was absent from practice. On my return I was pleased to find that substantial progress had been made, the space gained was maintained, and that the muscles had materially improved. I took up the work again along the same lines and continued until almost the normal opening of the jaws had been secured, with, however, but little lateral motion, the adhesions which held the left side of the jaw readily giving way to the continued pressure of the jack. In the course of a year the patient's health demanded exclusive attention, and because of tuberculosis further maxillary irritation was at this time discontinued. Within the past six years, however, the patient has seldom found it necessary to make use of the springs; her health also has gradually improved. As you can see, the patient, though not robust, is in fairly good condition.

7 West Fifty-eighth Street.

DISCUSSION.

DR. G. V. I. BROWN, Milwaukee—I think Dr. Curtis is in danger of being misunderstood, when he evidently describes conditions of true and false ankylosis. He speaks of permanent and temporary ankylosis and gives as etiologic factors contracted third molars, pulpitis and conditions of that character. What Dr. Curtis really means is not ankylosis, but trismus. I think we ought to draw a very distinctive line between a muscular contraction of a temporary nature as described due to more or less direct irritation of the nerve trunks and a condition caused by inflammatory processes or degenerative conditions of the temporomaxillary articulation. So far as operative measures are concerned nothing can be said but the highest praise. These cases are extremely troublesome, and Dr. Curtis' results are a warrant that the proper methods were employed.

DR. CHARLES F. ALLAN, Newburgh, N. Y.—I have never had a case of osseous formation in the jaw and I think they are very, very rare. The coagulation of the secretions as a result of traumatism which causes the ankylosis is sufficient to make a strong bar to the jaws closing as they should. I have never found that any application made to cause absorption was in any way effective. Pressure under chloroform and daily use of the screw opener by the patient would be the only means to cause return to normal conditions.

A CASE OF TYPHOID FEVER WITH AN UNUSUAL COMPLICATION.*

WILLIAM EDGAR DARNALL, A.M., M.D.
Gynecologist to the Atlantic City Hospital; Physician to the Mercer Home for Invalid Women.
ATLANTIC CITY, N. J.

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Hemorrhage as a complication of typhoid fever presents some interesting phases. The literature on the subject of enteric fever abounds with discussions of hemorrhage from almost every organ in the body, but the uterus seems to have been overlooked. In the literature at my command I have been able to find but very little. By most authorities on the subject no mention whatever is made of uterine hemorrhage as a complication of typhoid fever. Osler, however, does mention "a rare and fatal form of typhoid fever characterized by cutaneous and mucous hemorrhages." Montgomery, in his work on gynecology, draws attention to the fact that "severe uterine hemorrhage may frequently usher in an attack of typhoid fever," and this is not uncommon, especially if it happens to be about the time of the normal menstrual flow. In the case, however, presented here for your consideration, the hemorrhage did not usher in the attack, but occurred in what must have been at least the third week of the trouble. Neither could the normal monthly period have figured in any way in the case, as the menstrual epoch occurred just two weeks previously. The case briefly is as follows:

History.—Miss C., aged 30, of slight build and stature, nervous temperament, sallow complexion, of the brunette type, and not very well nourished, gave a history of being run down and tired out. She said her physician had advised her to come to the seashore for rest. On the way from Philadelphia she was prostrated with an attack of weakness while on the train. She entered the Mercer Home for Invalid Women, June 6, complaining of headache and some pain in the stomach. She said she was tired and would rest a day before going down on the Boardwalk.

The history of the case before she left her home is briefly stated by her physician as follows:

"Miss C. called at my office May 21, complaining of headache, muscular pains, weakness and indigestion. I found she had a slight fever and advised her to rest from all work and take liquid food. I also gave her calomel in fractional doses and a pill of acetanilid, salol and quinin. She called again to see me on May 28, still complaining of some headache and disease

* Read at the Fifty-fifth Annual Session of the American Medical Association, in the Section on Practice of Medicine, and recommended for publication by the Executive Committee: Hon. J. M. Anders, Frank Jones and W. A. Thayer.

fort about the stomach. May 30 she again came to my office, said she felt better, but had some vertical headache and was constipated. She had a temperature of 99.2, pulse 100, and tongue was too red. June 4 she reported herself much better. She was free from fever, but had a feeling of weight in the epigastrium and complained that almost every menstrual ovulation caused her pain. I urged her to refrain from any resumption of her work (music teaching) until she had taken two weeks at Atlantic City, where she expected to go on June 9. I have heard that she did give some lessons in the interval between her last call on me and her departure for Atlantic City. I considered her illness an attack of la grippe with gastric catarrh."

Treatment and Course of Disease.—Miss C. remained in bed the day after entering the Mercer House. The following day she complained of severe pain in the stomach and abdomen. Her temperature was 100, pulse 120, respirations 36. A severe diarrhea had now set in. She was given a capsule containing bismuth, opium, carbolic acid, salol and aromatic powder, which checked the diarrhea somewhat. Liquid diet was ordered. About 8 p. m. her temperature had risen to 105, and the menstrual flow appeared, although she had only had this two weeks previous. In this regard she had always been entirely regular and normal. She was delirious all night. Notwithstanding the presence of the menses a cold sponge was given, bringing the temperature down to 102.2. There was constant nausea and pain in the abdomen, while the stools became of a pea-soup character and were more frequent.

June 12 her temperature ranged between 99 and 102; pulse 94 to 104; respirations 24, and the slept some. There was no movement of the bowels, but the menstrual flow continued more freely than ever, and micturition was difficult. In view of her very weak condition, it was deemed wise to take some steps toward checking the uterine flow, which now assumed the proportions of a hemorrhage. She was therefore given a mixture containing ergot and liq. cotton. An enemlosition was also made for any local pelvic trouble that might be the cause of a metrorrhagia. The sexual organs were found normal. There was no evidence of any miscarriage for her reputation was above reproach. Not even an endometritis was found, and no lesion of any kind could be detected, either in the uterus, tubes, or ovaries. The vagina was now packed with gauze, which was left in twenty-four hours, and this succeeded in checking the hemorrhage.

June 14 the temperature ranged between 101 and 103; pulse varied all the way between 90 and 130 and was very weak; respirations 32. The patient was in a more or less stupid condition, somewhat delirious, but sleeping the greater part of the time. The bowels became loose again and she was troubled with a purulent hemoraghing. There was never much abdominal tenderness on pressure, or tympanitis, but the specimen of blood taken June 13 showed the Widal reaction; and on the 14th typical rose spots were visible, though few in number. For stimulation strychnin and whiskey were being given; and starch water and laudanum enemas for defecation and micturition, which had now become involuntary. Cold sponging was employed constantly to keep the temperature within limits.

June 15 the temperature range was between 101 and 103; pulse 114 to 143, respirations 34 to 42. This rapidity in the respirations rather suggested pneumonia. No pain in the chest was complained of, however, and no evidences of pneumonia could be detected after careful examinations of the lungs. The patient's condition was now critical, dejections involuntary; hiccoughing very troublesome; pulse very weak, and at times imperceptible; and she had become at this time almost deaf. Nausea and vomiting were so great that nothing could be kept on the stomach.

June 16 temperature between 102 and 103; pulse 140 to 164, while the respirations dropped to 18, and later to 14, and were labored. Death intervened at 9:40 a. m.

Autopsy.—At the autopsy, at which I was assisted by Dr. M. F. Ireland, the intestines were found very much distended with fluids. There were a number of Peyer's patches very much inflamed and enlarged; and two such patches were just at the verge of perforation though not quite through. There was no peritonitis either general or localized, the pelvic organs were given especial attention in order to determine if possible any local cause for the uterine hemorrhage. The uterus itself was in good position, perfectly normal, with no tumor growth of any kind, though it was perhaps a little under size. The ovarian and tubes did not show any indications of disease whatsoever; and there was nothing locally to indicate any cause for the severe uterine hemorrhage. The pelvic organs were not removed from the body and further exploration of other organs was not entered into out of respect to the family. Sufficient was found, however, to prove the correctness of the clinical diagnosis of enteric fever.

COMMENTS.

The case was a mild one up to the time she came to Atlantic City, so mild indeed that she did not confine herself to bed, but was up and around, able to visit her physician at his office, and even gave some music lessons, though she must have been affected as far back as May 21. This was one of the cases known to the laity as "walking typhoid," though none the less troublesome on account of its mildness, as was shown by its fatal ending, brought on, it may be, by the exertion incident to making the trip from Philadelphia to Atlantic City.

MESENTERIC EMBOLISM AND THROMBOSIS.

A STUDY OF TWO HUNDRED AND FOURTEEN CASES.

JAMES MARSH JACKSON, M.D.
Out-Patient Physician to the Massachusetts General Hospital.
CHARLES ALLEN PORTER, M.D.
Assistant Surgeon to the Massachusetts General Hospital.
WILLIAM CARTER QUINBY, M.D.
BOSTON.

(*Continued from page 1475, June 4, 1904.*)

Case 8.—K. M., widow, age 60, admitted to the medical wards of the Johns Hopkins Hospital Jan. 14, 1898. Complained of pain in the stomach.

Family History.—Unreported.

Past History.—Had malaria many years ago. Rheumatism in right leg and arm two years ago. General health fair. Has done very hard work. Habits excellent. Bowels regular. Subject to slight dyspeptic attacks, with vomiting, off and on for seven years. Frequency of micturition.

Present Illness.—Has not felt well for some months. About four weeks ago shortness of breath, from which she has suffered for years, grew worse, being very extreme on least exertion. Palpitation of heart, with dyspnea. Some swelling of feet. Pain and soreness in upper abdomen. Vomiting immediately after eating. On admission patient seemed in great distress. Slightly cyanotic. Lungs clear. Heart dullness not increased. Systolic murmur at apex. Pulse 92 to the minute, regular; vessel sclerotic. Abdomen full. Liver large and tender.

January 22. Temperature rose during the night from 99.2 to 103.7 degrees and patient became comatose. Pulse 148. Heart's action violent, pulsation over whole precordia. Respiration not increased, but deep and full. Face covered with sweat. Pupils contracted.

January 23. Temperature rose to 108 degrees, pulse 190, otherwise condition remained the same. There were a few rales heard at the base of the lungs. Leucocytosis 12,000. Death at 11:15 p. m.

AUTOPSY, 20 HOURS, JANUARY 24.

Anatomic Diagnosis.—Arteriosclerosis, small kidneys; chronic diffuse nephritis. Hypertrophy of left ventricle. Thrombosis of coronary arteries of stomach. Hemorrhage into serosa of stomach. Thrombosis (firm, white thrombi) of several branches of superior mesenteric vein. Hemorrhagic infarct in lung. Portal vein normal. No note on condition of mesenteric arteries.

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Case 9.—D. B., male, age 66, admitted to the medical ward, service of Dr. Coley, Oct. 15, 1899. Complaint, shortness of breath and swelling of abdomen.

Family History.—Unimportant.

Personal History.—Always healthy. Indefinite history of inflammatory rheumatism ten years ago. Gonorrhea twice. Syphilis. Heavy drinker. Had been to Johns Hopkins Hospital four times since 1896 with roughening of aorta, mitral insufficiency and stenosis, and arteriosclerosis.

Present Illness.—Two weeks before admission return of cardiac weakness. Bowels very constipated. On admission, marked dyspnea and cough. Abdomen very much swollen; small preperitoneal hernia; ascites. Marked tenderness in right hypochondrium. Temperature 98.5, pulse 66 to the minute, collapsing. For three or four days previous to October 20 patient complained of pain, usually in right hypochondrium, at times more general. October 20 at 3 a. m., sudden, severe, sharp pain in abdomen. The pain persisted almost continuously from this time on.

October 22. Abdomen somewhat distended and exquisitely tender. Great nervousness and excitability. Temperature 98 degrees, pulse 96, small and weak.

October 30. General condition same. Temperature 100, pulse 112 in morning. Death at 6 p. m.

On October 23 patient had five stools; on October 29, two stools. No blood passed. No mention made of vomiting.

AUTOPSY, OCTOBER 30, 1899, DR. FLEXNER.

Anatomic Diagnosis.—Arteriosclerosis; hypertrophy of the heart. Sclerosis of the aortic valves. Free globular thrombus in the left ventricle. Marantic thrombosis in right auricle. Thrombosis in superior mesenteric artery (or embolus). Hemorrhagic infarction of intestine. Acute peritonitis. Chronic passive congestion. Stomach polyp. Peritoneal cavity contained much bloody fluid.

The infarcted intestine consisted of all the jejunum, ileum, cecum, ascending colon and part of the transverse colon. The intestine was much distended, deep red in color, and covered with fibrinous deposits.

Case 10 (Dr. C. A. Porter).—Miss C. D., 76 years, April 21, 1899. About a week ago she was suddenly seized with severe pain in the epigastrium and back. On April 20 she was again taken with sharp pain, running transversely across the epigastrium. This came on after going upstairs after tea. She vomited at once, and several times later, without much pain. The pain continued for some hours, but she had a normal movement that evening. Dr. Cushman of Dudley Street, Boston, was called and gave morphin gr. ¼, with strychnia. The pain and nausea continued, despite treatment, until morning, though she slept some hours. In the morning she was distinctly worse. The patient was seen by Dr. C. A. Porter at 11 that morning.

Physical Examination.—Face drawn, pulse 108 and weak. Heart was somewhat enlarged. The belly was moderately distended, but not tender. The pain was referred to just above the navel, crosswise over this area of the abdomen. No urine had been passed since the night before. The rectum was collapsed and some dullness was made out in the left flank. Ten ounces of urine was drawn by catheter. This showed albumin and casts (fatty, etc.). She grew worse in general condition and vomited dark material. Laparotomy was done at 5:30 p. m. of the same day by Dr. C. A. Porter. A foul odor was emitted by the intestines. The cecum was dark green in color and surrounded by adherent omentum. All the small intestines were contracted and dusky in color. The veins of the intestines were full but not distended. The arteries did not pulsate. She died on the table.

AUTOPSY. DR. WRIGHT.

Autopsy showed the heart to be normal. The mitral valve was thickened and calcareous. A thrombus 1 cm. long was attached weakly to this curtain. The aortic valves were normal. The superior mesenteric artery for 6 inches below its origin was occluded by a gray-red thrombus mass, with a granular surface, adherent to the arterial walls. The small intestines were dark red, with purple fluid in the intestinal cavity. The walls of a large part of the cecum and of the adjacent ascending colon were green and foul. The appendix was normal. The spleen showed two infarcts, the kidneys a glomerulo-nephritis.

Case 11 (Dr. C. A. Porter).—M. H., woman, 39 years. Jan. 25, 1899.

Past History.—More or less chronic diarrhea for last three or four years. Has had three children, the last five weeks ago. In bed ten days; normal convalescence. Previous pregnancy was in 1897, after which she was in the Massachusetts General Hospital for "milk leg."

Present Illness.—Well till four days ago, when she had some pain in right hypochondrium, not severe, but enough to prevent her working. Pain soon moved to umbilicus, where it remained constant, something like a colic, coming and going. Vomited evening before entrance. Bowels moved every day till day of entrance; nothing peculiar about stools. Pain has gradually increased in severity. Entered hospital about 7 p. m. Had severe pain in abdomen and poor pulse at 8 p. m. Enema brought away a few small fecal masses of normal color and consistency.

Physical Examination.—At 9 p. m. Temperature 98.6, pulse 96, of poor quality; respiration 23. Leucocytosis 20,200. Woman pale, rather poorly nourished. Hollow eyes with dark veins about them. Eye clear, expression rather "strained," though perfectly bright and intelligent. It was evident that she was laboring under peritoneal shock. She talked freely, though evidently in extremely poor condition. The tongue was moist, the center covered with a superficial, brown "fur." Heart and lungs negative. Respiration thoracic.

Abdomen.—Liver dullness normal above, in right mammillary line; two finger breadths below upper limit of dullness tympany is found. Area of splenic dullness also diminished. Abdomen in general somewhat distended, left side more than right. Both recti rigid, left more than right. Pain most marked directly within umbilical cicatrix. Tenderness greatest over area size of palm of hand, to the left of umbilicus, where the muscles resist the slightest pressure. Dullness in left lower quadrant. No peristalsis heard on auscultation.

Vaginal examination showed a rather large uterus, not tender. Some induration without tenderness in left side of pelvis; no bulging. Rectal examination negative.

Urine.—Red color, acid, albumin ¼ per cent., sugar absent. Sediment contained some pus, considerable normal blood, a few granular casts and squamous epithelium from bladder or vagina.

OPERATION. DR. C. A. PORTER. HYMEN.

Incision in left rectus six inches long. About 800 c.c. of slightly red-tinted turbid serum escaped, containing a few flocculi of lymph. Culture from this was sterile. Examination of gall bladder, appendages and appendix was negative. On retracting left rectus outwards, from directly under tender area there emerged a coil of dull, dark, plum-colored intestine. Five coils were glued together by recently exuded lymph. There was no circulation in this bowel; no kink or band. At the lower end there was an abrupt line of demarcation, below which the intestine was of normal consistency. Above the blackened bowel the color faded gradually into what seemed like normal intestine, though the walls of the gut were somewhat thicker and firmer than normal, with here and there engorged vessels. The mesentery was thickened to twice the normal, felt rather firm, with indurated lines running toward the bowels; evidently thrombosed veins, as the arteries could be felt to pulsate. The bowels could not be kept within the cavity, so the ascending colon, which was much distended, was punctured and collapsed, the incision then sutured. This gave more room. There were no signs of injection in the large intestine. The blackened gut was rapidly removed by a wedge-shaped incision in the mesentery, one inch below the abrupt lower line of demarcation, and six inches above the upper, ill-defined border. On dividing the mesentery the arteries spurted freely. In all of the veins, on the other hand, moderately firm, dark thrombi were found. The patient's condition did not allow time for a suture of the resection, so, after toilet of the peritoneum with salt solution, the two ends of the gut were brought out of the abdomen, surrounded by gauze, and the wound rapidly closed. Patient put to

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but in very poor condition. Time of operation, 35 minutes.

January 26. Early in the morning the pulse became poor, 130 to the minute. Temperature 102.5. No nausea or vomiting. No reaction to stimulants, and death followed at 7 p. m.

AUTOPSY. 26. J. H. WORCESTER.

Heart and lungs not saved. The portal vein and practically all its branches are distended, firm to the touch, bluish in color and filled with clotted blood. No extensive dissection of interior of veins was made in order not to destroy the specimen. A part of the portal vein at its entrance into the liver was opened and found to be occluded by a gray, red, firm, fleshy mass, adherent to the intima of the vessel and extending a short distance into one or two of the branches going into the liver. No thrombus in splenic vein. The mesentery of the small intestine shows a defect which has been closed with sutures. Opposite this point a portion of the small intestine is absent. The remaining jejunum for about two feet above resected end is a dark red to blackish color, infiltrated with dark bloody fluid, and its serosa showing thickened condition. The mesentery supplying this is not infiltrated with blood, but fairly normal in appearance. Liver and spleen not remarkable. Kidneys show a pale opaque appearance on section. No atrophy; markings normal. Uterus and appendages not remarkable.

Anatomic Diagnosis.—Resection of intestine; extensive thrombosis of portal vein and its large branches; hemorrhagic infarction of a portion of jejunum; acute degenerative nephritis.

Case 12 (Dr. C. A. Porter.)—Man, 47 years, electrotyper. Entered Massachusetts General Hospital Jan. 6, 1904. Transferred from Dr. Shattuck's service.

Family History.—Negative.

Past History.—Children's diseases. Chorea 20 years ago.

Present Illness.—Cough, dyspnea and palpitation for four months. Precordial pain, radiating from arms, occasionally for last three months. Attack lasts 15 minutes. Some distress after eating. Pain often comes on after exertion. Some amenorrhea at this time. Ever since youth has had occasional trouble with piles, pain and itching, and sometimes palpable masses coming down; considerable pain and tenderness.

Physical Examination.—Well developed and nourished. Lungs, a few moist rales at each base. Breathing rapid and somewhat labored. Lips faintly cyanotic. Patient breathes easiest in upright position. Heart, apex fifth space one-half inch outside nipple line, rhythm regular. Systolic murmur loudest at apex and transmitted outward. Diastolic murmur at base, transmitted downward. Pulse, good volume, fair tension, quick and of Corrigan character. Capillary pulse not observed. Visible pulsation of brachial carotids and femorals. Radial arteries sclerotic. Pistol shot murmur in groins. Abdomen full, soft, tympanitic. External tabs of old hemorrhoids, internal hemorrhoids palpable and visible on straining, purplish and sloughing. No edema.

Urine.—Normal color, turbid, acid, 1,025, trace of albumin, sugar absent. Sediment, some granular and hyaline casts. Few blood corpuscles and cells, with crystals.

OPERATION, JANUARY 8. DR. C. A. PORTER. SYRUM.

Under anesthesia, which was given by the drop method, with plenty of air, it was noticed that the patient, who had an aortic and mitral lesion, was somewhat cyanotic in his ears, although his pulse remained good. His hemorrhoids and veins of the lower extremities appeared dark blue. After he was thoroughly under ether, which he took without struggling, the circulation improved. With a ligature 3 piles were tied off, and a good deal of hypertrophied skin removed by a circular incision. An iodoform gauze plug was inserted into the rectum, with a morphin suppository. During the afternoon, after recovery from ether, he complained of some pain in his lower abdomen, distension and increasing dyspnea. His temperature was normal, pulse about 100, rather weak tension, sounds rather indistinct. During the night he had a movement, and after morphin was more comfortable, though the distension steadily increased, with some pain in the lower abdomen, and especially marked tenderness on deep pressure in the left iliac fossa and just to the left of the umbilicus.

Examination January 9 at 9 a. m., showed an edema of the legs, respiration 32 to the minute, slight cyanosis, pulse weak and irregular. Abdomen was markedly distended, tender on pressure. Rectal tube brought away some gas, but no fecal matter. He vomited about one pint of brownish material, without fecal odor. At 12 o'clock the abdomen, in spite of turpentine stupes, and vomiting a quart of brownish, foul-smelling material from the stomach, was still more distended, though the vomiting of the stomach had given him slight temporary relief. Examination of the dependent portions of the abdomen revealed the presence of some fluid. Tenderness in the left iliac fossa was more marked. The white count was 14,000, the temperature 97.5. Heart sounds heard all over abdomen. The urine had not been passed until early morning, and this was about one pint in amount.

In view of the age of the man, with senile features, and arteriosclerosis to some degree, and of the relative suddenness of the onset of this pain, with marked distension and tenderness in the abdomen and the inability, in spite of enemata, to move the bowels, it appeared as if the diagnosis was probably a mesenteric embolism or thrombosis, and though his condition appeared most discouraging, it seemed best to make a small incision under primary ether, and at least open up the intestines, as the increasing distension was undoubtedly causing heart failure, in spite of strychnin and digitalin in repeated doses.

Dr. Musgrave, on examination of the patient before operation, thought that he found evidence of a small embolus at the base of the right lung, but owing to the shallowness of the respiration this could not be absolutely determined.

OPERATION. DR. C. A. PORTER. COCAIN AND ETHER.

On making a rapid median incision below the umbilicus, the intestines throughout were found to be violet in color, with poor circulation. They were distended and obviously paralyzed. On removing some coils it was seen that they were filled with air and fluid, which at once gravitated to the dependent portions, as in an autopsy subject. The abdomen contained about one quart of turbid fluid, with flakes of fibrin here and there on the gut walls. The bowels were opened with a small slit and about three quarts of slightly brownish fluid escaped. This was thin and watery. The patient's pulse suddenly failed and he died on the table, in spite of stimulation, oxygen and artificial respiration. The mesentery was spread out, and on various areas of it and on the intestine were found petechial extravasations of blood varying in size up to one-half inch in diameter. There was no edema of the mesentery. Throughout the distribution of the mesenteric artery it could be felt everywhere as a firm cord, rolling under the finger. A portion everywhere as a firm cord, rolling under the finger. A portion of the mesentery, with the vessels, was excised for examination. The veins bled. There was no hemorrhage from the rectum. Examination of excised piece showed all the arterial walls much thickened and one of them occluded. Veins free. Autopsy was refused.

In this case, the operation for hemorrhoids seemed to have no direct connection with the cause of death, because the symptoms set in too soon to have been caused by a propagated thrombus from the rectal vessels. It is possible, however, that the depression during the recovery from ether, the vomiting and postoperative distension, may have been factors in causing thrombosis of the artery, or more probably, that an embolus became detached from an aortic valve.

Case 13 (Dr. C. B. Porter).—D. M., man, 31 years, fireman, entered Massachusetts General Hospital Dec. 27, 1901.

Family History.—Father died at 55 of cancer of tongue. Habits, tobacco in moderation, no alcohol.

Past History.—Children's diseases. Generation twice, no abscess. Otherwise well.

Present Illness.—Three weeks ago began to have pain all through abdomen, very severe, lasting four days, at first general, but finally localized in right groin. Vomited often on first day, retaining nothing. Could not urinate for three days, when great relief after passing urine, which was bloody. Has been somewhat bloody ever since. Never any jaundice. Severe chills daily about 6 p. m., followed by sweating.

Physical Examination.—Well developed and nourished.

Lungs negative. Heart slightly enlarged to right. Abdomen full, slightly resistant in right side, with tenderness, not sharply localized. Tympanitis throughout. Liver dullness from fourth rib in nipple line to costal margin, not palpated.

December 27. White count 42,000. No plasmodia. White in ward, chills have continued, without discovery of plasmodia. Has had morphin for pain. Urine has shown a little pus and blood. Rare, brown granular casts at first, later fatty, granular casts, and few fatty, epithelial cells, first, later fatty, granular casts, and few fatty, epithelial cells.

January 5. White, 10,000.

OPERATION. DR. C. B. PORTER. GAS AND ETHER.

An incision six inches long was made an inch below the right costal border and parallel to it. The liver was large, firm and injected, with a few adhesions on its upper surface. The surface of the liver under these adhesions seemed slightly softer than the rest and pitted a little on pressure. A trocar inserted at this point did not discover any pus. The gall bladder was normal. The whole liver was palpated as far as the hand could reach. Nothing abnormal found beyond congestion and congestion. The right kidney was palpated and found normal. A gauze wick covered with rubber dam was placed over the cut areas in the liver above mentioned and the wound closed.

January 6. Temperature this a. m. 98, p. m. 105, and had a chill. Pulse 160 and very weak.

January 7. Another chill, with partial collapse. Is delirious and very restless at times.

January 8. Is weaker and looks more emaciated. White 23,000. Lungs negative. No plasmodia.

January 9. White 27,000. Bowels move well with enemata. Takes food well." Has a great deal of pain in right side.

January 12. Has been growing steadily weaker since last note, with occasional chill, sweating and collapse. Delirious. Dressing has been changed and wick removed; no discharge. The liver was tapped with a trocar to-day, but no pus found. There is dullness and diminished breathing at base of right lung. Aspiration failed to withdraw any fluid.

January 14. Collapsed this afternoon and died.

AUTOPSY. DR. J. H. WHITNEY.

Gangrenous appendicitis, with abscess formation in the adhesions and gangrene and perforation of the wall of cecum near appendix. Suppurative phlebitis of the ileocolic and superior mesenteric veins, and suppurative thrombophlebitis of the portal vein, with multiple abscesses of the liver. Abscess in right kidney. Laparotomy wound. Localized peritonitis in region of right lobe of the liver. Acute hyperplasia of spleen. Bronchitis. Streptococcus septicemia.

Bacteriologic Report.—January 13. Culture from liver puncture shows numerous colonies of the *Staphylococcus pyogenes aureus*.

CASE 14 (Dr. C. B. Porter).—J. D., male, 64, married. Hardware worker. Entered Massachusetts General Hospital, Oct. 26, 1901, 7 p. m.

Present Illness.—Three days before had sudden, severe pain in the belly. It was situated somewhat to the right of the navel. On that day he had diarrhea, but no vomiting. Since the first day he has been in constant pain about the umbilicus, with increasing distension. No tenderness accompanied the pain, but there has been persistent nausea and vomiting, increasing meteorism, and no motions for two days.

Physical Examination.—Fairly well-developed and nourished. Heart not enlarged. Good impulse, no murmurs. The pulse was 96, of fair compressibility, but irregular. Lungs show nothing abnormal. Temperature 100, respiration 22. The abdomen was distended, especially about the navel, where there was some tenderness. Costal and iliac grooves are not obliterated. Immediately to the left of the navel was a dull area, about the size of a dollar. This area felt like a rigid centre, although that muscle was soft above and below the mass. The belly was elsewhere tympanitic, except in the flanks, where sliding dullness was observed. Rectal examination showed no bulging. White count, 24,000. Iodophilia, marked reaction.

OPERATION. DR. C. B. PORTER.

At the laparotomy a large quantity of free, clear fluid escaped. (Culture sterile.) Immediately presenting in the field, as the recti were drawn back, was seen a coil of bowel, which appeared to be doubled into a loop and held there by a second encircling coil. Including the mass was a sheath of adherent, indurated omentum. The loop of obstructed bowel was dark red in color. Here and there were bright, yellowish green mottlings, three-quarters of an inch in diameter, covered with thick fibrin. Over the reddened areas the vessels could be made out as darker streaks, running about the circumference of the gut. The mesentery, immediately attached to this part of the bowel, was of fair color, thickened, but bled scarcely at all when cut, except for slow, dark ooze. The omentum was here hard and very friable, and twice its normal thickness. The entangled coils were separated by blunt dissection, with the greatest care, until the whole six inches of discolored bowel was free. There were no changes evident in the coil that was tied around the loop just described, while at either end of the gangrenous bowel was a sharp line of demarcation. The gangrenous bowel was resected, and an end-to-end anastomosis made. The cut edges of the mesentery were infiltrated, friable, and bled only as a dark ooze. No other obstruction, or discolored bowel was seen, and no fibrin flakes came to light, except those adherent to the dead loop.

The microscopic examination, by Dr. W. F. Whitney, of the bowel removed, "shows mesenteric artery and vein filled with a more or less adherent thrombosis, especially so in the artery, the inner coat of which was proliferated. In places, the thrombosis seems pure red, and in others more or less stratified or mixed. Diagnosis, thrombosis of mesenteric vessels with gangrene of the bowel." The operation appeared at first to relieve the condition, but soon there was a recurrence of all the previous symptoms. The abdomen was tender and distended. Nothing passed the rectum to his death, three days later.

AUTOPSY.

Autopsy showed three feet of small bowel matted together, under an adherent omentum. The bowel affected was proximal to the scar of the resection. It was exactly similar to, though not so far diseased, as the bowel taken out at the operation. There were darkened and light green areas, the latter and fibrin attached. There was free fluid, but no fibrin. Culture taken of fluid showed a growth of some sort, but the tube was accidentally destroyed before a microscopic examination was made. On separating the omentum from the bowel a rent was made at the joint of the resection at the mesenteric attachment. All about the suture, at this point, the bowel was green and gangrenous, and whether it had yet leaked could not be told from its appearance.

CASE 15 (Dr. M. H. Richardson).—B. W., woman, 61 years, entered Massachusetts General Hospital March 25, 1897.

Family History.—Negative.

Past History.—Malaria and typhoid.

Present Illness.—Perfectly well until five weeks ago, when ankles and arms became swollen. This went in a short time, and she began to have pain in abdomen, not localized, and increased on motion. Attacks have increased in frequency until past week, when they have been almost constant. Vomited during attacks of pain. Vomitus greenish until last few days, when it has been dark and very foul. Bowels regular until five weeks ago, since then extreme constipation. Has passed no gas. Pain not related to eating. No blood by mouth or stool. Has been losing weight slowly for some time.

Physical Examination.—Well developed and fairly well nourished. Heart negative. Abdomen much distended and tympanitic. Intestinal coils visible. Nothing could be felt because of the distension. Patient drowsy, lips dry, breath foul and tongue coated. Temperature 100, pulse weak, 110-120.

Clinical Diagnosis.—Carcinoma of descending colon.

OPERATION. DR. M. H. RICHARDSON. ETHER.

March 26. A three-inch incision in median line, at level of umbilicus. Hard mass felt by examining hand, at lower end of descending colon. Wound then closed with silkworm gut sutures. Patient then turned on right side, and incision made

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down and forward from costal border to crest of ilium, following outer edge of quadratus lumborum. Descending colon grasped, purse-string suture placed in it, and gut united to skin with sutures. Opening then made in intestines, and a Mixter tube inserted. Rest of wound then closed.

Patient's condition did not warrant doing a resection. The mass was a hard, firm tumor, apparently filling the whole of the lumen, about the size of a hen's egg. An enlarged mesenteric gland also felt. About sixteen ounces of liquid feces and gas escaped from the tube.

March 27. Very comfortable night. Vomited once, fecal in character. Tube draining freely, and distention gone entirely.

March 28. Comfortable. Taking liquids well. No distention.

March 29. Temperature 100. Condition improving. Some leakage about tube.

March 31. Pulse weak and intermittent. Has failed much during last two days.

April 2. Pulse better, and general condition improved.

April 8. Temperature 101.2. This morning some nausea.

April 11. Condition much better. Sensorium clear.

April 24. As well as usual last night. At 5 a. m. sudden labored breathing. Cold extremities. Imperceptible pulse. In spite of forced stimulation, died in less than an hour.

AUTOPSY. DR. J. E. WHEELY.

April 24, 1897. Adenocarcinoma, stricture of descending colon, with suppuration of neighboring retroperitoneal tissue. Lumbar colotomy. Laparotomy wound. Arteriosclerosis with thrombi of aorta and superior mesenteric artery, with beginning infarction of small intestine. Anemic and hemorrhagic infarcts of kidneys. Arteriosclerotic atrophy of kidneys. Ovarian cystoma. In abdominal aorta, a mass about the size of the little finger, not adherent, comprised of friable, grayish material, intermixed with black blood clot, in variable proportions. In superior mesenteric artery, at origin, a grayish-red, friable, firm, adherent mass, filling the vessel. The aorta shows rather numerous yellow patches, but no calcareous plates. The thoracic portion shows a gray-red clot adherent to intima, in the neighborhood of a small yellowish patch. The small intestines, for the most part, lie in the pelvic cavity. They are rather dark colored, not black, their serous veins injected. The mucosa and wall veins infiltrated with fluid, mucosa red colored.

CASE 16 (Dr. M. H. Richardson).—J. F., man, 26 years, shoemaker. Recommended to Massachusetts General Hospital March 18, 1901, for appendicitis.

Past History.—Always well and strong, with exception of occasional attacks of pain in lower abdomen, for last three years, which have not been severe enough to keep him in bed, and have been relieved by movement of bowels after taking Epsom salts.

Present Illness.—Began night before last, with a very severe pain in lower abdomen, which traveled from side to side, and was not relieved by movement of bowels. Yesterday morning vomited. The pain continued and was so severe that he was awake all last night. Copious movements of bowels this morning after salts. Pain remains in lower half of abdomen, not localized in any one spot.

Physical Examination.—Large, well-nourished man, 210 pounds. Heart and lungs negative. Abdomen fat, slightly tympanitic, and not very tender in region of pain. Very slight tenderness over appendix. Doubtful mass to be felt in appendix region. Sent to ward. Temperature 100.7, pulse 104, respiration 24, whites 9,800. March 16. Whites 7,600.

OPERATION. DR. M. H. RICHARDSON.

A four-inch incision along outer border of right rectus. Appendix found slightly enlarged and reddened, bound down by a few adhesions, and twisted upon itself. Base tied off with silk, and appendix cut through with Pasquelin cautery. Mesentery clamped and tied off with silk. Wound closed by fine silk sutures of peritoneum and fascial layers. Good condition at end of operation.

March 17. At 9 a. m. began to complain of abdominal pain and distress, and vomited a large amount of normal stomach contents. Pulse and temperature rising. Abdomen distended. Vomiting continued, becoming fecal in character. No result from enema injected three times in as many hours. Turpentine stupes on abdomen. At 11 a. m. pulse poor, 140. Considerable distention. Temperature rising, and vomits every 15 to 20 minutes.

OPERATION. DR. J. C. MUNFORD.

Wound opened. Distended bowel protruded through it, and small amount of turbid serum evacuated. Bowel shows no sign of peritoneal inflammation, but a coil of small intestine about four to five feet long, near ileocecal valve, has a dark, mottled appearance, and its mesentery shows thrombosis of the vessels leading to it. Peritoneal cavity washed out with salt solution and Mixter tube placed in cecum. Considerable gas escaped through the tube. Patient at this period collapsed. Strych. 1/30 and oxygen. Wound closed with drainage and patient sent to ward. Feces discharged freely through tube, but without relief to general condition. Died 6 p. m. in spite of repeated stimulation. No autopsy permitted.

CASE 17 (Dr. F. B. Harrington).—J. M., man, 48 years. Twelve days ago attack of pain, most marked in epigastrium. Had never had similar attacks. Up and about in a few days. Eight days later had a chill with pain and collapse. Seen on the twelfth day. Temperature 103, pulse 108. Tenderness in right iliac region.

OPERATION.

Abscess about the appendix, which hung over the brim of the pelvis. The appendix was removed; showed perforation. Patient did well for two or three days, then began to vomit and have return of pain. Seen on fourth day after operation. Abdomen distended and painful. Vomiting; bowels had moved. Death on sixth day after operation.

AUTOPSY.

Only a local examination was allowed and this had to be done under very adverse circumstances. About two feet of the beginning of the jejunum was of a blackish brown color, and covered with flakes of fibrin. No general peritonitis. Mesentery of affected gut thickened. Intestinal contents bloody. Both arteries and veins of affected mesentery firmly thrombosed. Cavity of appendix abscess perfectly walled off, and all the intestines in this neighborhood found normal.

CASE 18 (Dr. F. B. Harrington).—H. L., man, 40 years, tailor, entered Massachusetts General Hospital Sept. 20, 1902. Yesterday morning while at work was seized with sudden, violent abdominal pain, which prostrated him completely. Was nauseated and vomited. Doctor prescribed morphin, without much relief to pain, which continued and grew worse during day. Vomiting increased and continued during day. Condition has been growing gradually worse.

Physical Examination.—Well-developed man. Pulseless, sighing respiration, no heart murmurs, lungs full of rales, abdomen distended and painful all over on pressure, no rigidity, extremities cold. No rectal examination made. Whites 21,000.

(To be continued.)

Clinical Report.

LUMBAR ABSCESS;

REPORT OF SIX CASES TREATED BY ASPIRATION AND INJECTION OF IODOFORM-GLYCERIN EMULSION.

ALFRED IRVING LUDLOW, M.D.

Second House Surgeon Lakeside Hospital.

CLEVELAND, OHIO.

No attempt is made, in this report, to establish the absolute value of aspiration and injection of lumbar abscess with the iodoform and glycerin emulsion. The investigations already made in regard to this method show that it is of great benefit to many patients. Although the cases cited below are too few in number to be of positive value in themselves, yet when added to other reported cases they may be of some confirmatory value. It is with this idea that we present the following cases, occurring in the service of Dr. Dudley P. Allen at Lakeside Hospital.

CASE 1.—A male, aged 26 years, white, single, admitted to the hospital Feb. 7, 1903. Four months previous to the time of entrance the patient noticed a swelling about the size of a walnut in the right inguinal region. The tumor gradually increased in size, but at no time did it cause pain.

Family History.—Father, mother, four brothers and one sister living and well. One sister died of pulmonary tuberculosis at the age of twenty-three (six years ago).

Personal History.—Measles during childhood. For the last three years, particularly in winter time, he has been troubled with a cough. His physician told him that he had pulmonary tuberculosis. In April, 1900, the patient complained of severe pain in the right lumbar region. This lasted about three weeks, during which time he experienced some fulness in the right groin whenever he flexed his right thigh on his abdomen. After this period, however, no symptoms were noticed until the distinct swelling appeared.

Physical Examination.—The tumor is somewhat pyriform in shape, about one-half larger than the ordinary incandescent lamp, and extends from the right external abdominal ring upward, backward and outward, just above Poupart's ligament along the crest of the ilium to the midaxillary line. The tumor is fluctuant. The skin is normal in color and there is no increase in surface temperature. The remainder of the physical examination is negative except for some dulness in the right supraclavicular and infraclavicular spaces.

Treatment.—The patient received no treatment before coming to the hospital. In this, as in the following cases, the operative treatment consisted of a thorough sterilization of the skin over and about the tumor, followed by aspiration of its contents with a trocar. As a rule, about three ounces of an emulsion of iodoform and glycerin, fifteen grains to the ounce, were injected into the abscess cavity. In the majority of cases the operation can be done under local anesthesia. In this case ten aspirations and injections were made. The first two at intervals of a week and the remaining eight at intervals of two weeks. During the periods between the last eight aspirations the patient was permitted to return to his home. At each aspiration, except the last, from six to ten ounces of fluid were withdrawn, the first being of a whitish color, containing a cheesy material, while the remainder were of a dark brown color. At the last aspiration only one ounce of a reddish brown fluid was obtained.

Results.—The bacteriologic findings were negative, all cultures being sterile. The patient has been seen within the last few days and shows no evidence of return of the abscess. It might be interesting to add that in February, 1901, while he was troubled with a severe cough, tubercle bacilli were found in his sputum. At present, October 21, 1903, however, he is gaining in weight, has had no cough for many months, and seems to be in excellent condition.

CASE 2.—This patient, a female, aged 19, white, single, was admitted to the hospital April 15, 1900.

Family History.—Negative.

Personal History.—General health good except for the present trouble. She gives a history of three injuries to her back, but does not remember the time or location of the injuries.

A year previous to admission the patient began to have pain in the lumbar region, especially when arising from a chair or after jarring the body by a misstep. The pain and discomfort gradually increased. In October, 1899, she was advised by her physician to try absolute rest. Accordingly she remained in bed for three months, which resulted in marked improvement. In February, 1900, she noticed a swelling just above Poupart's ligament on the right side. A smaller swelling, together with a general fulness more externally, appeared just to the left of the vertebral column in the lumbar region.

Physical Examination.—This was negative except for the swelling above noted.

Treatment.—April 19, 1900, twenty-five ounces of light green cloudy pus were removed from the left lumbar region, the trocar being inserted near the apex of Petit's triangle. Although only two ounces of the emulsion were injected, the urine, on the next day, gave a strong iodin reaction.

On May 2 the right inguinal tumor was aspirated, and five ounces of greenish pus obtained. The same amount of emulsion was used, but the urine gave no iodin reaction. Ten days later the trocar was inserted in the left inguinal region where a swelling had appeared and four ounces of grayish pus were withdrawn.

One week later this same region was again aspirated and three ounces of grayish pus removed. A month intervened before the next aspiration. During this period the patient was out of doors in a wheel chair every pleasant day.

At the last aspiration, on the left side, about five ounces of greenish pus were evacuated.

Cultures made at the time of each aspiration were sterile.

Results.—Three months after this last aspiration the patient was examined by Dr. Allen and no indication of any reaccumulation could be detected. At the present time her physician says that there has been no reappearance of the abscess and that her general health is excellent.

CASE 3.—Female, aged ten years, white. Admitted to the hospital Feb. 7, 1901.

Family History.—Father died of tuberculosis at the age of 35. Mother died of the same disease at the age of 30.

Personal History.—Patient fell down stairs when one year old. No trouble was apparent until a year later, when the spine showed some kyphosis in the lumbar region. Since this time she has suffered repeated attacks of pain in the back at various times. About a year ago (November, 1899) she began to complain of pain in the left knee. Frequently the pain has been so severe as to cause her to remain in bed while in the intervals between these attacks she could play and walk about as usual. One month ago the pain became especially severe, and since that time it has been almost constant. In addition to this trouble she gives a history of pertussis, measles, scarlet fever, varicella and diphtheria. She has coughed considerably from time to time for the last four years.

Physical Examination.—The heart was found normal. The lungs show a few râles at the right apex, posteriorly, and râles over the larger portion of the left lower lobe. The lumbar vertebræ show a marked kyphosis and the dorsal vertebræ a mild scoliosis. Examination of the extremities negative, except that percussion of the left lower extremity in its axis causes mild pain in the hip.

Treatment.—The first treatment employed was rest in bed and constitutional treatment. Extension was applied for two weeks, giving considerable relief. On April 1, 1901, a swelling was noticed in the left inguinal region. It began to increase in size and became tender. The next day a trocar was inserted 3 centimeters above the left anterior superior spinous process of the ilium and several ounces of thick yellow pus aspirated. The usual amount of emulsion was injected into the cavity. Two weeks later, the abscess having reaccumulated, the same process was employed. For a few days the patient was somewhat depressed, and iodin was demonstrated in the urine.

Results.—Within a week, however, she commenced to improve greatly, and on June 1 she was placed on a Bradford frame. As often as the weather permitted she was taken out of doors. Under this treatment she gained rapidly in weight and strength. There was no evidence of reaccumulation of the abscess when the patient was discharged. At the present time (October, 1903) there is still no indication of return of the abscess. Her general health is good and she is able to attend school regularly.

CASE 4.—Female, aged 20 years, white, single, was admitted to the hospital Jan. 31, 1902.

Family History.—Negative.

Personal History.—She had typhoid fever three years ago, but otherwise her general health had been good until July, 1900, when she began to have "neuralgic" pains in her right hip and thigh. Later the corresponding parts on the other side of the body were affected. From the time of the first attack the pain has been fairly constant, being aggravated after exertion. She experienced difficulty in rising up after stooping down to pick up objects from the floor and often was obliged to assist herself by taking hold of a chair or table.

In December, 1901, she noticed a mass just above the left iliac crest, anteriorly, which has gradually increased in size and has caused her to favor that side in walking. She has never had any symptoms localised in her back at the site of the kyphosis.

Physical Examination.—The heart and lungs are normal. At the second and third lumbar spines there is a kyphosis slight in degree, but distinct. A mass can be made out in the left iliac region extending about half way from the anterior superior spinous process of the ilium toward the median line, downward toward the pubes and upward to a little above the crest of the ilium. It is distinctly fluctuant, and the amount of tissue covering it anteriorly is evidently not great.

Treatment.—Previous to entering the hospital she had received no treatment. After rest in bed for a week, the left iliac region was aspirated in the usual manner, the trocar being inserted just above and to the inner side of the left anterior superior spine of the ilium. Sixteen ounces of greenish pus were drawn off and three ounces of the iodoform emulsion injected. Within a week the abscess cavity began to refill, and February 24 a second aspiration was made at which time the same amount of pus was removed. During the interval between this and the next aspiration the patient was up in a wheel chair almost every day. March 19 it was evident that another aspiration was necessary, for distinct swelling and fluctuation could be made out in the left iliac region. Accordingly, this was done, and again sixteen ounces of greenish pus were evacuated. A week after this aspiration the patient was allowed to return home after being instructed to live out of doors as much as possible. On April 21 she returned to the hospital. The abscess had reappeared and distinct fluctuation was present. The next day the abscess was again aspirated and this time about eight ounces of yellowish pus were obtained.

Bacteriologic Report.—The coverslip and cultures from the pus obtained at the first aspiration were negative. Pus from the second aspiration showed the presence of the *Bacillus proteus vulgaris*. Cultures from the third and fourth aspirations were sterile. No tubercular bacilli could be detected.

Results.—The patient was allowed to go home after the fourth aspiration with instructions to report from time to time. She was seen by Dr. Allen June 27, 1902. Her general health was very much improved and she felt much stronger, although she had not gained much in weight. A little thickening was made out in the iliac fossa, but no fluctuation could be perceived. The patient was again examined in December, 1902. There was no evidence of return of the abscess. Her general health was excellent. At the present time (October, 1903) there is no return of the abscess.

CASE 5.—Female, aged 7 years, was admitted to the hospital Jan. 2, 1903.

Family History.—Father, mother, two sisters and three brothers are living and in good health. Her grandmother and uncle died of pulmonary tuberculosis.

Personal History.—The patient's general health has been fairly good. About two years ago her parents noticed a bulging of the spine. Until six months ago the patient complained of no pain, but at that time she commenced to limp and suffer pain in the left knee. The kyphosis has been gradually increasing to the present time.

Physical Examination.—There is a marked kyphosis with a slight right scoliosis beginning at the eleventh dorsal vertebra and extending to the fourth lumbar. There is no tenderness on pressure. Some resistance can be made out in the left iliac fossa. The remainder of the physical examination is normal.

Treatment.—Three days after admission to the hospital a plaster jacket was applied, and three days later the patient was allowed to go home.

June 18, 1903, the patient returned to the hospital with a large fluctuating mass on the upper and outer side of the left thigh. This mass has been gradually increasing in size for the past few weeks. It was unattended with pain or redness. The day after admission, under ether anæsthesia, the abscess was evacuated and 225 c.c. of thick dirty yellow pus removed. The usual amount of iodoform emulsion was injected. The next day iodin was found in the urine. June 27, the abscess having reappeared, it was again aspirated, and this time 300 c.c. of pus were removed. A third aspiration was done on July 7, at which time about 200 c.c. of yellowish fluid were obtained. July 24 a fourth aspiration was made and eight ounces of brownish fluid were withdrawn. This time four ounces of the emulsion were injected. Two days after the aspiration there was the only marked rise of temperature during the course of the aspirations. On this day the temperature was 102 F.

Bacteriologic Report.—Cultures taken at the time of each aspiration were sterile.

Results.—July 29 the thigh appeared practically normal, so the patient was sent home with instructions to her physician to send her back to the hospital if the abscess reappeared. Up to the present time (October, 1903) there has been no return of the abscess, and the patient is in excellent health.

CASE 6.—A female, aged 33, white, married, was admitted to the hospital Aug. 6, 1903.

Family History.—One sister died of tuberculosis.

Personal History.—Patient had diphtheria two years ago. She has always been of a nervous disposition. Five years ago she had an attack of pain in the lumbar region. At that time she thought the trouble must be rheumatism. These attacks of pain continued to come on at varying intervals. Between the attacks she was fairly well, although she had some difficulty in arising from a reclining position or on attempting to pick up any object from the floor. At night this pain was so severe that she would cry out. About ten months ago a swelling appeared in the right inguinal region.

Physical Examination.—In the region of the lumbar vertebræ there is a well-marked scoliosis to the left and a well-defined kyphosis in the same region. In the right groin there is a swelling about three centimeters in diameter, fluctuant and becoming smaller when the patient reclines. The remainder of the physical examination is negative.

Treatment.—Aug. 8, 1903, under local anæsthesia, an aspirating needle was inserted into the tumor mass and 300 c.c. of greenish yellow pus removed. Two ounces of the iodoform emulsion were injected. The day after the operation the urine gave a reaction for iodin. A second aspiration was made August 13 and eight ounces of yellowish serous fluid withdrawn. One week later very little swelling could be detected and by August 30 the mass had entirely disappeared. On August 31 the iodin reaction disappeared from the urine. The patient was sent home on a cot with instructions to remain in bed several weeks.

Bacteriologic Examination.—The pus contained many leucocytes, but both cultures were sterile.

Results.—At present the physician who is attending the patient reports that he has detected no return of the abscess.

SUMMARY.

1. Four cases gave a family history of tuberculosis.
2. Five cases occurred in females whose ages ranged from 7 to 20 years and one case in a male 25 years old.
3. Two patients gave a history of injury to the back.
4. In three cases two aspirations were made, in one case three, in another four, and in another ten.
5. The urine from four cases out of the six gave a reaction for iodin the next day after the aspiration. This reaction persisted only for two or three days, except in one case in which it persisted for two weeks.
6. Slight mental depression was noticed in two cases.
7. As a general rule, there was an elevation of temperature from two to four degrees following each aspiration.
8. The cultures were sterile in every case except one, in which the *Bacillus proteus vulgaris* was obtained.
9. In all the six cases there has been no indication of return of the abscess after a period of five years in one case, three years in another and two years in a third, while in the remaining three one year or less has elapsed since the last aspiration. There was a marked improvement in the general health of every patient.

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THE SIGNIFICANCE OF PATHOLOGIC PROCESSES IN EVOLUTION.

Pathology, that is, the study of disease in the broadest sense, has received only limited attention from the point of view of general biology. Problems connected with the evolution of disease, with the significance of pathologic processes in evolution, and others of like nature, seem to occupy but little of the interest of either biologists or pathologists. We have human pathology, veterinary and animal pathology, vegetable pathology, each with its various subdivisions, and each cultivated with great assiduity on account of its practical and economic importance, but general comparative pathology, somewhat after the order of general comparative anatomy, as yet has barely shown signs of development. Perhaps the most important contribution from the little cultivated field is Metchnikoff's well-known comparative study of inflammation, in which he traces some of the principal phenomena of the inflammatory process up through the ascending stages of the animal kingdom. This work has contributed greatly to a broader understanding of the nature and significance of inflammation.

At first glance one might be tempted to assign to pathologic processes only a negative significance in evolution, to regard them merely as an expression of inferiority and weakness, and as part, at least, of the means by which inexorable nature carries out the verdict of extermination. If so regarded, their value in evolution would be wholly negative, as they could cause no new and better qualities in the descendency. It has been suggested that it is on account of this negative valuation of pathologic processes in biology that pathology has been permitted to remain more or less isolated in the group of biologic sciences.

It is, however, only superficial consideration that will thus interpret the significance of pathologic processes. Closer examination will show that in many cases these assume a significance of an entirely different and positive nature in evolution. There are numerous simple as well as complex processes which, when set in motion by abnormal conditions, appear to be of direct advantage under the circumstances. Here may be mentioned regeneration, hypertrophy, the interesting adaptations in bones and vessels to new and strange conditions, certain phases of thrombosis, even atrophy which has been described as the faculty of an organ to adapt itself to conditions of diminished nutrition, thus circumventing necrosis, and this faculty certainly becomes one of great advantage when the period of diminished food supply is temporary. No one can fail to see much that is useful and advantageous in the complex reactions to injurious agents observed in inflammations; and in the case of immunity, natural and acquired, our astonishment and wonder know no bounds, so marvelous are the precision and the scope of the protective reactions, concerning which so much has been brought to our knowledge during the last few years, and which lend themselves especially well to comprehensive comparative studies. Indeed, the amount of useful material already at hand for comparative study is quite considerable. In the case of most degenerations and of tumors, it is more difficult, if not altogether impossible, to recognize either direct or indirect advantages. Certainly no one has yet been able to see malignant tumors in a favorable light.

In practically all these favorable instances the pathologic reactions have physiologic prototypes. Regeneration and growth are taking place constantly in health. Phagocytosis, on which so much stress is laid, is merely exaggeration of normal nutritive processes in certain cells. At present the production of antitoxins and other antibodies is best explained as the result of special adaptations of normal mechanisms whereby nutrition is carried on. A noticeable difference between the physiologic and the pathologic manifestations of these functions is seen in their imperfections and inadequacies under many of the abnormal conditions. Regeneration may be incomplete, resulting in the formation of scar tissue, which often has decided disadvantages. Inflammations frequently establish conditions that in themselves are fraught with dangers. The reactions that result in the manifestations of immunity are often unable to neutralize quickly enough the toxins and to destroy promptly enough the invading organisms. Hence, as has been emphasized, there is abundant scope for intervention by the physician armed with all the various appliances of his art, some of the most directly useful of which are products of experimentally produced pathologic reactions. But after all, those individuals must enjoy the best chances for survival and reproduction whose organisms suffer least harm, because best able to adapt themselves, and protect the life and function of their cells under diseased conditions. Just as there are variations in the limits of purely physiologic regulatory mechanisms, so also there are individual differences of degree in the power of the adaptive and protective reactions that establish themselves in disease and permit the continuance of life. In progressive evolution, it naturally must be in the descendants of individuals with the most perfect adaptive and protective powers that an ascending completeness and perfection of such powers will be found. Viewed in this light many pathologic processes assume a significance of positive character in biologic evolution, a point of view that

would tend to increase the interest in pathology among biologists, and thus further its development along broader lines.

THE TREATMENT OF HEMOPTYSIS.

While the presence of blood in the sputum is often due to disease of the lungs, it is by no means always so, and the recognition of the source of the bleeding is naturally of pre-eminent importance, not alone on account of its prognostic significance, but also from its bearing on the treatment to be employed. Occasionally the blood comes from soft and spongy gums resulting from various causes; at other times it is from the nares or the pharynx. Violent paroxysmal cough may cause laceration of tissue, with the escape of small amounts of blood. The sputum is mixed with blood, further, in cases of pneumonia and of hyperemia of the lungs from any other cause, inflammatory or hypostatic, as well as in the presence of pulmonary infarction and of diseases of the blood itself.

Blood from the lungs will appear in generous amount when pulmonary vessels of considerable size are opened by rupture or destructive processes; for example, as a result of aneurism, syphilis, actinomycosis, parasitic diseases, bronchiectasis, gangrene, abscess, tuberculosis.

Hemoptysis due to pulmonary tuberculosis may occur early in the course of the disease, even before other suggestive symptoms have been noted. It is then probably a result of hyperemia, the blood escaping from the vessels by diapedesis. The bleeding that occurs at a somewhat later period, when distinctive symptoms and physical signs are present, is probably due to ulceration of the bronchial mucous membrane. At a still later period, when excavation of the lung has taken place, the blood is derived from rupture of a pulmonary aneurism or erosion of the coats of an artery. Finally, hemoptysis may occur at any stage of the disease in plethoric subjects.

In a brief communication dealing with this subject, Dr. J. Penn Milton,[1] on the basis of personal experience at a well-known sanatorium, and from observations made elsewhere as well, ventures certain recommendations that are slightly at variance with current practice. When hemoptysis occurs early, as a result of hyperemia, he suggests carefully graduated, gentle exercise, such as slow walking, short of fatigue and dyspnea, under shelter, unless fever be present or the hemorrhage has been copious, or the patient be agitated. He believes that as a result of the exercise the blood-vessels, cutaneous and otherwise, in all parts of the body, but more especially in the limbs, become dilated, and thus a certain quantity of blood is withdrawn from the lungs. When the counterindicating conditions named are present, the patient should be put at rest in a sheltered situation out of doors, or in a bedroom, if necessary, and ¼ grain of morphin may be placed under the tongue. Beyond a saline purge, hemostatics are not necessary.

When the bleeding is due to tuberculous ulceration of the bronchial mucous membrane, the treatment should be directed to raising the lowered vitality and to improving the general nutrition. Exercise short of fatigue may be permitted or not, in accordance with the body-temperature.

When hemoptysis results from rupture of a pulmonary aneurism or erosion of the coats of an artery, the frequency of the heart-beat should be lessened, and the lungs be placed at rest, by seclusion and recumbency in bed, a hot water bottle being applied to the feet. Morphin may be administered in doses of from grain 1/4 to grain 1/3 by the mouth or under the skin. The blood-pressure should be lowered by saline purgation. The diet should at first be light and unstimulating, consisting of raw egg, milk, raw beef sandwiches, etc. A full and nourishing diet should be gradually resumed as early as possible. If the bronchial tubes are obstructed by blood-clots, and cyanosis and dyspnea are present, the morphin should be withheld and expulsion be permitted to take place. The patient must remain in bed until the sputum has been free from blood for at least a week.

The hemoptysis occurring in plethoric subjects at any stage of the disease should be treated by lowering the blood-pressure by saline purgation, by a full amount of exercise—unless some counterindication be present—and by modification of the diet, which should include vegetables, especially green vegetables, and a minimum amount of meat, with abstinence from alcohol. The bleeding, when its occurrence can be anticipated, may be prevented by the administration of 30 grains of sodium salicylate in conjunction with an aperient.

It is appropriately pointed out that the treatment outlined is not to be pursued indiscriminately, but it must be applied intelligently in accordance with the conditions present in the individual case. Reference is made also to the fact that exposure to the wind may act as an exciting cause of hemoptysis in tuberculous patients, who should, therefore, be protected from this hurtful influence.

1. British Medical Journal, March 26, 1904, p. 662.

HOME TREATMENT FOR TUBERCULOSIS.

The last issue of *L'Assistance Familiale*[1] is devoted to a study of "Home Treatment for Tuberculosis," by Dr. G. E. Papillon, Paris. Dr. Papillon points out that the early period of the present general warfare against tuberculosis was characterised by an exaggerated idea of the danger of contagion which led physicians to advocate the entire segregation of tuberculous patients, almost as if they were leprous. The impracticability, as well as the cruelty, of this policy is now generally recognised, although its error was probably more quickly perceived in France than elsewhere on the continent. It may be remarked in passing that this fear of contagion has now percolated to the popular mind, whence it must be laboriously dislodged by the medical profession as a part of the anti-tuberculosis campaign.

1. L'Assistance Familiale, No. 7, 1904, p. 73.

Dr. Papillon endeavors to explain why the sanatorium treatment of tuberculosis has never attained the proportions in France that it has in Germany, nor been regarded with the same enthusiasm. He claims that the chief elements of weakness in the sanatorium plan are, 1, the comparatively limited numbers who can be received in such institutions; 2, the necessity for returning the recovered or improved patient to his unimproved home surroundings, and, 3, the patient's own strong objection to leaving his home for the sanatorium before his disease has incapacitated him for work.

As to the first point, it must be noted that in Germany, which is better supplied with sanatoria than any other country, the total number which could be cared for in such institutions during the year 1902-1903 was only 17,823, while the deaths alone from this disease are estimated as 100,000 yearly. As to the second point, Dr. Papillon says, using the German sanatoria as his text: "Those who are discharged improved or apparently cured must return to the surroundings in which they contracted the disease, often to deprivations, insufficient food, abuse of alcoholic drinks, and thus they are liable to fall an easy prey to a fresh infection. This is, in fact, shown by the official statistics of the sanatoria maintained by the Workingmen's Insurance Societies of Germany. Of the men treated in 1897 in these sanatoria only 27 per cent. were still able to work in 1899."

Perhaps the last objection, namely, the unwillingness of the patient himself, is, in practice, the most difficult to meet. In Germany, thanks to the insurance system, the patient has little choice and must go to the sanatorium if sent; but in France and elsewhere there is no such control. Dr. Papillon states that the experiment made by the city of Paris at the Sanatorium of Angicourt shows that the respectable workingman in France will not voluntarily resort to the sanatorium, and that the population of this institution is composed chiefly of homeless alcoholics.

In consequence of this apparent failure of the sanatorium plan of treatment in France, Dr. Papillon advocates the founding of special dispensaries for home treatment of tuberculosis, and regards as the proper subjects of such treatment all cases of "non-contaminating," e. g., closed tuberculosis, while the "contaminating," open cases, should be considered as pre-eminently the proper subjects for isolation in sanatoria, for there only can they be prevented from spreading contagion. According to Dr. Papillon, dispensaries for the treatment of tuberculosis should perform two distinct functions—first, the usual therapeutic treatment; second, popular education in hygiene, by means of house-to-house visitation and personal instruction of patients and their families, a disinfection station for clothing, linen, sputum cups, etc., and a diet kitchen from which may be dispensed the food needed by the very indigent. A few such dispensaries are already in successful operation in France.

The pessimistic attitude of Dr. Papillon toward sanatorium treatment for tuberculosis is, perhaps, somewhat dependent on the French prejudice against all things German. It would seem hardly fair to make a sweeping condemnation of any system on the failure of a single experiment. In our own country there is no difficulty in finding worthy inmates for any properly-conducted tuberculosis sanatorium for early cases; indeed, such applicants are only too numerous. Nevertheless, Dr. Papillon's emphasis of the importance of home treatment will meet with assent from American readers, and his suggestions as to the mode of carrying it out are in line with the experiments already inaugurated in some of our larger cities by the various associations for the prevention of tuberculosis. Sanatorium treatment of this disease is, of course, the ideal treatment, and no effort should be spared to increase the number of sanatoria in this country, as yet so inadequately supplied; but no matter how great our success in this direction, there will always remain a large number of tuberculous patients who can not avail themselves of this treatment and must be cared for at home, as well as the discharged patients, who must be kept from a recurrence of the disease.

To devise a plan of home treatment at once practical and scientific is a task attended with enormous difficulties, but which must be undertaken if we are ever to make a successful war on tuberculosis.

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BOTULISMUS AND THE SO-CALLED MEAT POISONINGS.

More or less severe forms of disease may arise from the consumption of unhealthy meat and meat-products. Outbreaks of this kind would appear rare with us because of the dearth of corresponding observations in periodical literature. Whether instances escape observation because of erroneous diagnosis need not be discussed now. In Europe, especially perhaps in Germany, a number of observations and discoveries have been made that furnish the basis of the present knowledge of these conditions. So-called meat-poisoning and botulismus (sausage-poisoning) are different and distinct forms of disease. In meat-poisoning the meat concerned is derived from diseased cattle suffering from septic and enteric processes, the exact etiology of which merit further study, but in which paratyphoid bacilli play an important part. In the case of cows it may concern puerperal affections, and in calves umbilical infection. The flesh is harmful immediately after slaughtering, and Fischer (Kiel) has pointed out that symptoms may follow the use of well-cooked meat. There are indications that the pathogenic properties may increase with preservation. The possibility that meat of this kind may even infect other originally healthy meat with which it comes in contact has been suggested. Meat-poisoning may occur in three forms, namely, (1) the gastroenteric, the most frequent, and characterized by fever, vomiting, diarrhea, with more or less headache and backache, and weakness, the attack lasting from two or three days to weeks; (2) the choleraic, which develops within short intervals after the fatal meal; vomiting, rice-water discharges, cramps

in the legs, subnormal temperature, produce a picture not unlike cholera; (3) the typhoid-like form, with symptoms like those of typhoid fever, including an incubation of several days (four to nine). During the last few months attention has been directed in these columns to the relation between meat-poisoning and paratyphoid bacilli; it has been thought that all these forms may be expressions of the same intoxication and infection, depending largely on the quantity of finished poison and living bacilli taken in with the meat. In other words, certain forms of meat-poisoning correspond clinically and etiologically to paratyphoid fever; other more acute forms are produced by the taking in of larger quantities of toxic products in meat of animals infected with paratyphoid bacilli. In view of the similarity between meat-poisoning and other gastrocenteric disturbances, may it not be that the etiologic rôle of diseased meat often escapes attention? Is it not also likely that certain circumscribed outbreaks of typhoid-like nature, following picnics, weddings and other festivities, may have been the result of meat-poisoning. There is sometimes sharp differences of opinion as to the nature of such outbreaks, and in the future the possibility of meat-poisoning must be considered.

Botulismus, or sausage-poisoning, is not dependent exclusively on the use of sausages. A large variety of meats may be the cause of the symptom-complex in question. In these cases, however, it concerns meat from healthy animals. The toxicogenic qualities develop after a certain time, presumably as the indirect result of imperfect preparation and preservation. We deal now with a pure poisoning, due to introduction of the toxin produced by bacillus botulismus, an anaërobic saprophyte, described by van Ermengen, and generally accepted as the essential cause of botulismus. The symptoms develop within twelve to thirty hours; transitory vomiting and diarrhea are followed by paralysis of the recti muscles of the eyeballs, of the pharyngeal and laryngeal muscles, and of other bulbar nerves, death resulting in 15 to 45 per cent. from cardiorespiratory disturbances. The poison of botulismus is destroyed by boiling; hence careful sterilization of all conserved meats must be effected and maintained.

HARVARD OARSMEN HEALTHY.

The dangers of physical exercise have been strongly insisted on of late, and yet it appears that these may possibly be more serious in the occasional strain of the non-athletes than to those who take an active part in athletic contests. Dr. Meylan, director of the Columbia University Gymnasium, gives the after-history of Harvard oarsmen, and finds that more than 97 per cent. were in good health, more than 37 per cent. have not consulted a physician for over ten years, and more than 50 per cent. have not been sick in bed for a week since they left college. Only one described his health as poor. He thinks that college athletes do not die young of heart disease or consumption. The hard training and college rowing do not do any permanent damage.

CALIFORNIA PRACTICE LAW VALID.

Our profession in California is to be congratulated on the recent decision of the Supreme Court maintaining the validity of the medical practice act. A few physicians, and the great raff of irregulars with whom they are temporarily in alliance, will have to accept the situation as best they can. It is not probable that there was much chance for any change in this decision, but while the litigation lasted it cast a sort of cloud over the validity of every act of the medical board, which is now done away with. The law is actually strengthened by the proceedings, and the result is in every way satisfactory.

DIRTY MONEY.

Certain dangers of dirty money are being agitated by the public press, and it is reported that an official in an eastern coal company has recently been a victim of anthrax derived from this cause. Considering the change which money undergoes from hand to hand, and the condition in which it is often found while still in circulation, we have plenty of suggestions as regards infection. The fact that the dangers are not realised by actual disease more frequently is perhaps an argument against the validity or ubiquity of the pathogenic bacteria. It is probable that with the frequent handling of money disease may be communicated, but practical experience does not seem to bear out the theoretic estimate of the dangers involved. Nevertheless, a law which would cause banks and others to disinfect bills, and the government to withdraw them from circulation after their reception, as is the case with the Bank of England notes, might be an excellent prophylactic of some occasional contagions.

POISONING BY PICROTOXIN.

Cocculus indicus and its active principle picrotoxin are but little used in medicine, and their physiologic and toxicologic effects have not been fully elaborated. They are bitter and somewhat nauseous, and are said to increase the secretion of the gastrointestinal mucous membrane and to promote the peristaltic activity of the bowel. In physiologic doses they cause slowing of the action of the heart and increase in arterial tension, and they stimulate respiratory activity. When given in larger doses, drowsiness, stupor and muscular trembling result, or perhaps a heavy stupid intoxication, with vertigo, incoördination and impaired sensibility, followed by headache, depression, dyspnea and nausea. Tonic and clonic convulsions have been observed in animals treated experimentally. Picrotoxin has been employed in the treatment of night-sweats, chorea, epilepsy and paralysis agitans, and in the form of a local application in the treatment of various parasitic diseases of the skin. It is known that *Cocculus indicus* is added to beer to give it a bitter taste, and evidence has recently been brought forward showing that it or picrotoxin has been used as a poison for criminal purposes, in some instances with fatal results. Thus Hubert C. Carel[1] reports from the laboratory of medical chemistry of the University

1. St. Paul Medical Journal, June, 1904, p. 421.

of Minnesota three cases in which picrotoxin was isolated from the human body, and he expresses the belief that considerable amounts of this substance are bought by saloon-keepers in parts of Minnesota to be used for knock-out purposes and subsequent robbery. He refers also to three cases occurring, respectively, in an attorney, a physician and a business man, in which a so-called extract of hazelnuts was added to liquor served at a bar, in order to impart a fine flavor, with the development of symptoms of cocculus-poisoning. Whether such practices are common in other parts of the country or not is a matter worthy of inquiry. In any event, it would seem to be incumbent on the analytical chemist to look for picrotoxin in the tissues in any case of death from poisoning in which other causes are not demonstrable, and especially in obscure or suspicious cases in which, from want of other evidence, death is attributed to alcoholism.

Medical News.

CALIFORNIA.

Personal.—Dr. S. B. Lyon, Los Angeles, who underwent operation at Mercy Hospital, Chicago, June 17, is making a satisfactory recovery.——Dr. Charles F. Glidding, West Berkeley, has been appointed resident physician at the state penitentiary, Folsom.

Lindley Made Dean.—Dr. Walter Lindley, editor of the *Southern California Practitioner*, has recently been elected dean of the Medical College of the University of Southern California, which is now entering its twentieth session. Dr. Lindley was one of the organizers of the school and is professor of gynecology.

Southern California College.—The graduating exercises of the College of Medicine of the University of Southern California were held at Los Angeles June 14. A class of 24 was graduated.——The cornerstone of the new clinical laboratory was laid with formal ceremonies June 16. The building is to cost about $20,000.

ILLINOIS.

Cornerstone Laid.—The cornerstone of the new Evangelical Lutheran Hospital, Granite City, was laid, June 5, with impressive ceremonies. The building will cost about $50,000.

Must Not Spit in Moline.—Moline has adopted an anti-spitting ordinance, with penalties varying from one to five dollars for its violation. Signs are to be posted to warn strangers, the careless and the unwary against inadvertently spitting on sidewalks.

Personal.—Dr. William H. C. Smith, superintendent of "Beverly Farm Home and School," Godfrey, has been appointed by the governor a delegate to the National Conference of Charities and Corrections.——Dr. Joseph L. Wilcox has been elected city physician of Springfield, and Dr. Thomas W. Priest, Buffalo Hart, re-elected physician of Sangamon County.

Chicago.

Northwestern's Commencement.—On June 15 a class of 134 received degrees from Northwestern University Medical Department. Of these four received the degree of M.D. *magna cum laude*, and five the degree of M.D. *cum laude*.

To Europe for the Summer.—Dr. and Mrs. Frederick C. Hotz sailed for Europe June 20.——Dr. and Mrs. John Leaming will sail from Montreal July 14.——Mr. W. C. Fuchs of the Chicago Roentgen X-Ray Laboratory sailed for Europe, June 28, and the laboratory will be closed until his return, September 1.

Personal.—Dr. Sarah Hackett Stevenson, who has been seriously ill for a long time, is reported to be improving, and will return to Chicago in a short time.——Dr. N. Senn sails on his trip round the world westward, July 7, on the *Sierra* from San Francisco.——Dr. Elias R. Morse, who was struck by a cable car last month and suffered a fracture of both wrists, is making satisfactory progress toward recovery.

MARYLAND.

Personal.—Dr. William F. Forbes Hampden was struck on the head by a falling lamp in a car, and several bones were broken.——Dr. Elijah Williams, Arnniger, ex-Senator of Anne Arundel County, is seriously ill at the University Hospital, Baltimore.

Baltimore.

New Laboratory in Use.—The new laboratory building at the University of Maryland has been completed and is now occupied.

Smallpox and Deaths.—In the week ended June 18 one case of smallpox was reported, and in that ended June 25 two cases were discovered. The death rate for the latter period was unusually low, 14.32 per 1,000 per annum.

Orders Against Toy Pistols.—The Baltimore Police Board has issued most stringent orders against the use of the toy pistol and other similar devices that have hitherto been the cause of so many deaths from tetanus at this season of the year.

College Faculty Election.—At the annual meeting of the faculty of Maryland Medical College, Baltimore, June 3, Dr. William S. Smith was elected president, Dr. Alexander D. McConchie, vice-president, and Dr. J. B. Schwatka, dean. Dr. Charles R. Simon was elected professor of clinical diagnosis.

Recent Baltimore Epigrams.—The following epigrams are attracting attention in commencement circles: By Dr. William Osler, "Success consists in getting what you want and being satisfied with it;" by Prof. Basil L. Gildersleeve, "The secret of a happy life is to do what you most wish to do and be paid for doing it."

Courses on Psychology.—Prof. J. Mark Baldwin has announced the following courses on psychology at Johns Hopkins University: Professor Stratton will give the experimental course, Mrs. Fabian Franklin will lecture on visual sensation, and Dr. C. B. Farrar will take up physiological psychology, the structure and functions of the cerebral cortex.

Personal.—Dr. Henry M. Thomas has sailed for Europe.——Dr. J. Harvey Hill is at Mt. Mansfield, Vt.——Dr. William S. Baer sailed for Bremen, June 22.——Drs. Lillian Welch and Mary Sherwood have gone abroad.——Dr. G. Lane Taneyhill, Jr., sailed for Europe, June 21.——Dr. William Osler leaves July 16 to attend the British Medical Association meeting, July 28-29.

Comparative May Morbidity.—In May, 1904, as compared with May, 1903, the cases of smallpox reported in Baltimore increased from 12 to 20; scarlet fever from 120 to 122; typhoid fever from 27 to 28; measles from 44 to 103, and whooping cough from 3 to 10. Diphtheria decreased from 106 to 94 cases; mumps, from 40 to 37; varicella from 20 to 19, and tuberculosis from 53 to 42.

Inquests Must Be Held.—The state's attorney has called the attention of the coroners to the provision of the city charter requiring the holding of inquests in every case of death except when plainly accidental or from natural causes. This applies particularly to suicides, in which heretofore there has been no investigation by jury where the coroner could be certain of self-inflicted death, without suspicion of foul play.

Johns Hopkins Commencement.—The twenty-eighth annual commencement of Johns Hopkins University was held June 14. There were forty-five graduates in medicine, three being women. Diplomas were presented by Dr. W. H. Howell, dean of the medical faculty, who spoke forcibly of the importance of the work of the physician to the human race. The doctorate address was made by Dr. John Huston Finney, president of the College of the City of New York, on "Democracy and Education." The following appointments were made in the medical faculty: Dr. Percy M. Dawson, associate professor of physiology; Dr. Joseph Erlanger, associate professor of physiology; Dr. Warren H. Lewis, associate professor of anatomy; Dr. Hugh H. Young, associate professor of genito-urinary surgery; Dr. Thomas R. Brown, Rufus I. Cole and Louis P. Hamburger, associates in medicine; Dr. Arthur S. Lowenhart, associate in physiologic chemistry and pharmacology; Dr. Thomas McCrae, associate in clinical therapeutics; Dr. Charles H. Bunting, instructor in pathology; Dr. Henry W. Kennard, assistant in orthopedic surgery; Ernest G. Martin, Ph.D., instructor in physiology; Dr. Augustus G. Pohlman, instructor in anatomy; Dr. J. Morris Slemons, instructor in obstetrics, and Dr. George L. Streeter, instructor in anatomy.

Re Baltimore University.—As a result of the recent action of the Association of American Medical Colleges in suspending the Baltimore University, the State Board of Medical Examiners declined to examine Dr. Charles T. Schwatka, a graduate of that school, on the ground that the law under which it works allows the admission to examination only of graduates of schools which give courses "as defined by the American Association of Medical Colleges." The school in question was under suspension pending trial of alleged violations of the requirements of the association during 1903 and 1904. The board took the ground that, if guilty, the school was not giving a course as defined by the association. Dr. Schwatka applied for a writ of mandamus to compel the board to permit him to take the examination for license to practice. A full discussion of the merits of the case was held, and, in view of the fact that Dr. Schwatka was graduated several months prior to the date of the suspension of the school, and that he had no notice, Judge Stockbridge directed the president of the board to grant the examination within a reasonable time under threat of a mandatory order. This was accordingly done. The effect will be that other graduates under similar conditions will also be given a special examination by the board.

MASSACHUSETTS.

Automobile Accident.—Dr. Franklin S. Newell, Boston, was severely injured in an automobile accident recently. Dr. Richard F. O'Neill, who was with him, escaped with slight injuries.

Boston's mortality for the week ended June 25 was at the rate of 18.84 per 1,000 per annum, as compared with 11.89 for the previous week. The latter was almost the low record for the city.

Bunker Hill Day Casualties.—As a result of the careless handling of toy pistols, fire crackers and other explosives considered essential to the patriotic celebration of Bunker Hill day, more than 200 individuals sought treatment at the hospitals of Boston.

Graduating Exercises.—The College of Physicians and Surgeons, Boston, graduated a class of 27, June 15. The dean, Dr. Charles H. Cobb, presented the class, Dr. Charles E. Whittemore extended greetings, and Major Azel Ames, U. S. V., made an address on "The To-morrow of Medicine."

MICHIGAN.

Personal.—Dr. Ovidus A. Griffin, Ann Arbor, sailed for Europe, June 18.——Dr. Archie W. Herrick has been appointed health officer of Bay City, vice Dr. Charles M. Swanick, resigned.——Dr. John O. Gross, Escanaba, has been elected physician of Delta County.——Dr. R. Campbell McGregor, Saginaw, has sailed for Europe.

Comparative Morbidity.—For May, compared with the preceding month, measles, diphtheria and puerperal fever were more prevalent, and influenza, cholera infantum and meningitis were less prevalent. For May, compared with the average for May in the last ten years, measles, typhoid fever and smallpox were more than usually prevalent, and bronchitis, erysipelas, remittent fever, dysentery, cholera morbus, whooping cough, cholera infantum and meningitis were less than usually prevalent.

Persistent Vitality of Diphtheria Germs.—A health officer in Macosta County reports to the secretary of the Michigan State Board of Health that twenty years ago Mrs. T. lost a daughter from diphtheria, and that some of the girl's clothing was put away in a chest and sealed up. The chest was not disturbed until this spring, when the mother, 75 years of age, opened it and looked over the clothing, soon after which she was taken ill with diphtheria, and died June 17. The health officer believes she contracted the disease from the clothing infected twenty years ago.

May Mortality of Michigan.—The total number of deaths registered in Michigan for May was 2,937, corresponding to a death rate of 13.9 per 1,000. There were 275 fewer deaths than for the preceding month. Important causes of death were as follows: Tuberculosis, 239; typhoid fever, 60; diphtheria, 46; scarlet fever, 30; measles, 46; whooping cough, 15; pneumonia, 271; cancer, 114; accidents and violence, 166. Typhoid fever diminished in prevalence, while considerable increase may be noted in deaths from measles. There were three deaths from smallpox during the month.

The Most Dangerous Communicable Diseases.—Meningitis was reported present May, 1904, at 6 places, whooping cough at 99 places, diphtheria at 63 places, typhoid fever at 79 places, scarlet fever at 111 places, pneumonia at 117 places, measles at 176 places, smallpox at 179 places, and consumption at 272 places. Meningitis was reported present at 2 places less; whooping cough at the same number of places; diphtheria at 4 places more; typhoid fever at 3 places more; scarlet fever at 17 places less; pneumonia at 2 places more; measles at 7 places more; smallpox at 20 places more; and consumption at 12 places more, when compared with the preceding month.

MISSOURI.

Heyburn Bill Endorsed.—The Buchanan County Medical Society has passed resolutions endorsing and urging the passage of the Heyburn Pure Food bill.

Physician Assaulted and Robbed.—Dr. William F. Mitchell, Lancaster, while in St. Louis attending the meeting of a medical association, was assaulted and his watch and money were taken. After a few days in the City Hospital he was taken to his home.

The State Association.—The State Medical Association of Missouri met in St. Louis, May 17, 18 and 19, and elected the following officers: President, Dr. John N. Jackman, Kansas City; vice-presidents, Drs. S. M. Brown, Monroe City, Henry W. Latham, Latham, Thompson E. Potter, St. Joseph, W. B. Thompson, Armstrong, and John C. Rogers, Kansas City; secretary, Dr. Clarence H. Nicholson, St. Louis, assistant secretary, Dr. Edward J. Goodwin, St. Louis; treasurer, Dr. J. Franklin Welsh, Salisbury; judicial council, Dr. Frank J. Lutz, St. Louis, president, and Dr. Walter B. Dorsett, St. Louis, secretary; publication committee, Drs. Clarence H. Nicholson, St. Louis, Woodson Moss, Columbia, M. P. Overholser, Harrisonville, B. Sloan, St. Joseph, and L. A. Todd, Kansas City; delegate to the American Medical Association, Dr. John N. Jackson, Kansas City; Walter B. Dorsett, St. Louis and Alonzo E. Kiefer, St. Louis; alternates, Drs. Thomas Chowning, Hannibal, C. Lester Hall, Kansas City, and M. P. Overholser, Harrisonville.

St. Louis.

Emergency Hospital Near Exposition.—The cottage in Forest Park, located just east of the World's Fair grounds, will be remodeled and utilized as an emergency hospital during the World's Fair season.

Death of Dr. Chaddock.—Dr. Charles Gilbert Chaddock notifies us of an error in the death notice of April 16, whereby his name appears in place of that of his father, Dr. Gilbert Chaddock, who died in Berkeley, Cal., April 1.

Commencements.—Diplomas were given to a class of 32 at the thirty-third annual commencement exercises of the Kansas City Medical College, April 13.——On April 27 the commencement exercises of Barnes Medical College were held. Dr. Charles H. Powell delivered the doctorate address.——The medical department of St. Louis University graduated a class of 66, April 20. Dr. Young H. Bond, dean of the school, presided.——On May 19 a class of 63 received diplomas from Chancellor W. S. Chaplin at the commencement exercises of the medical department of St. Louis University.

NEW YORK.

Off for Europe.—Dr. and Mrs. William B. Ewers, Rochester, sailed on the Minneapolis for London, June 18.——Dr. and Mrs. C. W. Kriepell, Kingston, sailed June 20 on the Rotterdam for Boulogne.

Guarding New York's Water Supply.—At last the authorities seem to have recognized the dangers of contamination to the city water supply from the workingmen encamped in the Croton valley. Commissioner Oakley has appointed several additional inspectors to safeguard this region.

New Branch of Carnegie Institute.—A branch of the Carnegie Institute at Washington has been opened at Cold Spring Harbor, Long Island. It was erected at a cost of $50,000. Dr. Charles B. Davenport, who has had charge of the biologic laboratory of the Brooklyn Institute, will be in charge. The object of the new institute is to provide facilities for the study of the various branches of evolution.

The State Hospital for Consumptives.—The hospital at Raybrook, Essex County, will be ready to receive 50 patients by July 1. Preference will be given to indigent persons in the first stage of the disease. The state has expended $215,000 for the construction of the hospital and has appropriated $55,000 for the maintenance and conservation. An appropriation of $5,000 has been secured for the establishment of a camp for out-door treatment.

Civil Service Commission and Dr. Spratling.—The Municipal Civil Service Commission has refused to issue a certificate putting the name of Dr. William P. Spratling, the new superintendent of Bellevue, on the city pay-rolls. Dr. Spratling was transferred from the Craig Colony for Epileptics, a state institution, and the commissioners find that they have no authority to sanction the transfer of an official from a state to a city institution. This difficulty may be overcome if Dr. Spratling takes a municipal civil service examination.

Buffalo.

World Check Sale of Toy Pistols.—The Buffalo Academy of Medicine is making a determined effort to check the sale of toy pistols for the Fourth of July. Last year two boys lost their eyesight as a result of this abuse.

New Hospital.—Mercy Hospital, which will be conducted by Sisters of Charity, is soon to be opened in South Buffalo. A society called the Mercy Hospital Aid Society has been formed to provide for financial needs of the institution.

Personal.—Dr. Charles Hesse of Buffalo has been appointed junior physician at the Manhattan State Hospital, Central Islip.——Dr. Frederick A. Hayes, Buffalo, was attacked by three men in his office, June 3, who assaulted and attempted to rob him.

New York City.

Elective Fifth-Year Course.—A plan has been presented and approved by the faculty of the University and Bellevue Hospital Medical College providing for an elective fifth-year course for students.

Personal.—Dr. DeWitt C. Rosaine sailed on the Hellig Olav for Copenhagen, June 23.——Dr. William C. Gorgas and a staff of sanitarians have sailed on the Alliance for Panama, June 21.——Dr. Patrick H. Pitzhugh has returned from Europe.——Dr. and Mrs. Francis P. Kinnicutt sailed for Antwerp on the Zeeland, June 17.——Dr. Allan McLane Hamilton sailed on the Kaiser Wilhelm II, June 14.

Contagious Diseases.—For the week ended June 18, 1904, the following cases and deaths were reported to the Sanitary Bureau: 682 cases of measles, with 16 deaths; 375 cases of diphtheria, with 30 deaths; 302 cases of tuberculosis, with 156 deaths; 199 cases of scarlet fever, with 16 deaths; 93 cases of varicella; 32 cases of typhoid fever, with 7 deaths, and 33 deaths from cerebrospinal meningitis.

New Medical School.—Fordham College will branch out as a university in September. A medical school will then be opened. Among the members of the faculty selected are: Drs. George M. Kleinhahn, John Aspell, James M. Butler and Thomas J. Dunn. Dr. James J. Walsh will be dean of the institution, which will be affiliated in a clinical way with the new hospital which is to be erected on the grounds purchased from the college.

No Preserved Meat in New York.—The efforts of the Food and Dairy Commissioner of Pennsylvania to obtain pure food have led the officers of the board of health of this city to state that since the rigid measures of inspection have been in force, western packing houses have ceased to try to ship preserved meat into the city. Every train that comes into the city is inspected, and there are inspectors at all the slaughter-houses in the city. Condemned meat becomes garbage and is removed by the street cleaning department, so that there is no possibility of its being shipped elsewhere.

Pure Milk Supply.—One outcome of the efforts of the physicians of this city to obtain pure milk for infants and invalids is the Walker-Gordon Guaranteed Milk. There is an agreement between the Walker-Gordon Company and a commission of physicians, who serve without compensation, to receive reports from a chemist, a veterinarian, a bacteriologist and a physician, concerning the production and transportation of all milk sold under this name. The reports of the commission are to be submitted to the profession at large. The farms consist of 200 acres in a farming district having a small population and no village or manufacturing establishment near. The elevation and conformation are such as to secure good air and drainage. The water supply is from a well forty feet deep, carefully protected from contamination or surface drainage. The buildings are one-story high, without loft or cellar, and thoroughly hygienic in every respect. The food and manure are conveyed to and from the stalls by overhead trolleys. The cows are known as "grade" cows, representing mixtures of several breeds. No cows are purchased until they have undergone the tuberculin test, and then they are kept in a quarantine barn and the milk is not used until the veterinarian is satisfied that the cows should join the herd. The attendant of the cows in quarantine never goes near the regular herd. The milking cows are examined every two weeks, and once a year the tuberculin test is applied to every cow; oftener, if there is any suspicion. The cows are thoroughly groomed twice a day. The employes are selected with reference to health as well as to fitness for their special work. They undergo a physical examination twice a month. The milkers are required to clean their hands thoroughly and to wear sterilized white overall suits. After the cows have been cleaned, they are compelled to remain standing until they have been milked. The milkers' hands must be carefully washed after milking every second cow. To avoid dust, no feeding is allowed before or during milking. Only sterilized cans and pails are used. Within ten minutes from the time the milk is drawn from the cow, it is strained through sterilized gauze and cotton into a porcelain receiving and mixing tank; then it flows over a cooler, which reduces the temperature to 45 F., into a porcelain tank, from which the bottles are filled. The bottles are closed with freshly-sterilized pulp and foil caps, and in four hours are received in the city. Dr. L. Emmett Holt is chairman of the commission, and John H. Huddleston secretary.

OHIO.

Personal.—Dr. Henry R. Mallory has been reappointed a member of the Hamilton Board of Health.——Dr. and Mrs. Alonzo H. Tidball, Garrettsville celebrated their golden wedding anniversary, May 17.

Miami College Commencement.—The forty-fourth annual commencement exercises of Miami Medical College, Cincinnati, were held June 1. Dr. John C. Oliver delivered the doctorate address, and diplomas were conferred on 27 graduates by Hon. Jacob Shroder, president of the board of trustees.

Those about to marry in Ohio must now, by reason of a law passed by the last legislature, answer the following questions, only on satisfactory answers to which will licenses be granted:

Is either party a habitual drunkard?
Is either an epileptic?
Is either insane?
Is either under the influence of an intoxicating liquor or drug?

PENNSYLVANIA.

Philadelphia.

Reception to Dr. Musser.—A reception was given to Dr. John H. Musser, president of the American Medical Association, by the Medical Club of Philadelphia, June 15. Nearly 300 guests were present. Dr. Edward E. Montgomery, president of the club, presided.

Warning to Undertakers.—Fearing that crimes may be concealed or clews which might lead to their discovery be destroyed, the coroner has issued a circular letter to undertakers throughout the city forbidding the embalming of bodies on which a postmortem is likely to be held without first obtaining permission from his office.

Fourth of July Dealers Arrested.—Two dealers who illegally sold toy pistols to minors were promptly convicted and fined. This, the court says, is a warning for all dealers who violate the law on this subject. The law regulating the sale of these agents has been published in the lay press and will be enforced. Cases of tetanus are already reported from the use of the toy pistol.

Health Report.—There has been a progressive decrease in all forms of contagious disease, except diphtheria, an increase of 9 cases of which is reported. The cases of typhoid fever decreased 6, as compared with the previous week. There were 191 cases of contagious disease reported. The general death rate is much lower, the total for the week, 368, is smaller than for any similar period in many months. Last week there were 429 deaths, and in the corresponding period of last year, 420.

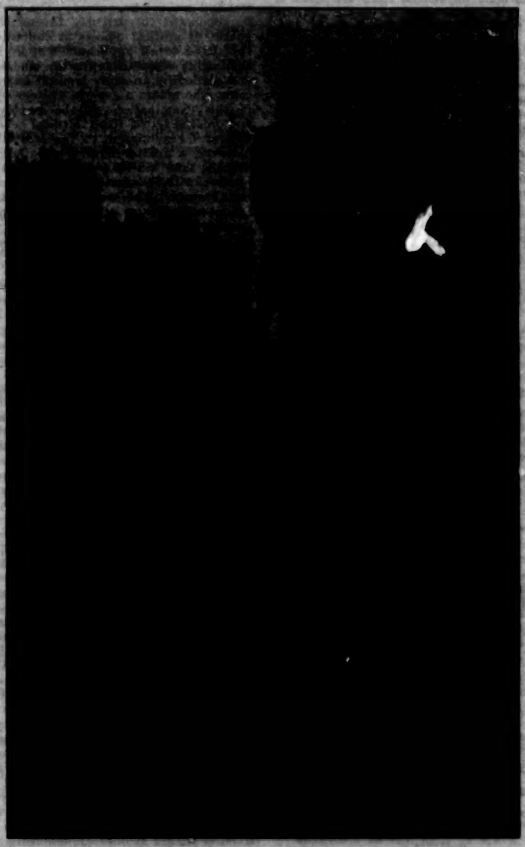
Personal.—Dr. Willis H. Manges has been appointed chief of the *x*-ray department at Jefferson Medical College Hospital.——Dr. Louis McKinnis, Colorado Springs, Colo., has been elected chief resident physician to the same institution.——Dr. James P. Hutchinson has been elected to the position on the surgical staff of Pennsylvania Hospital made vacant by the death of Dr. W. Barton Hopkins, and Dr. Frederick Sharpless has been elected to the resident staff.——The following have been appointed resident physicians at Samaritan Hospital: Drs. H. F. Dewitt, R. W. Barber, Harry A. Dunnan and J. M. Read.——James W. Irwin sailed for Europe, June 18.——Dr. Jesse W. Hirst sails from San Francisco early in August

for Seoul, Korea, as a medical missionary of the Presbyterian Board of Foreign Missions.

University Commencement.—The one hundred and forty-eighth annual commencement of the University of Pennsylvania was held June 16. A class of 96 was graduated in the department of medicine. The honorary degree of LL.D. was conferred on Sir Frederick Treves, on Dr. Horatio C. Wood of the University of Pennsylvania, and on Dr. Henry P. Bowditch, professor of physiology in Harvard Medical School. The degree of Sc.D. was conferred on Professor Russell H. Chittenden, director of the Sheffield Scientific School at Yale, and on Dr. George Dock, professor of theory and practice of medicine in the University of Michigan.——At the annual meeting of the Medical Alumni Association Dr. Samuel S. Stryker, of the class of 1866, was elected president.——The classes of 1869 and 1869 held their annual reunions June 13. Dr. Richard G. Stretch presided at the meeting of the class of 1869, and Dr. William Campbell Posey the class of 1869. Out of a membership of 126 at graduation, 14 were present at the meeting of the class of 1869, and 48 of 120 of the class graduated in 1869.

FOREIGN.

Return of Koch from Africa.—Robert Koch has resumed his work at the Berlin Institute for Infectious Diseases in the best of health, after an absence of nearly a year and a half. He was summoned to South Africa by the English government to



THE STATUE OF BENJAMIN RUSH.

(Reproduction of a photograph of the statue as it stands on the grounds of the U. S. Naval Museum, Washington, D. C. For account of the unveiling, etc., see THE JOURNAL, June 18, page 1662.)

work out means of prevention and cure for "coast fever," a new cattle disease of that region. He has not only accomplished this task, but has discovered also an efficient means of rendering horses immune to an endemic disease, known as the *Pferdesterbe*, "horse death."

The Empress Frederick House for Post-Graduate Instruction.—Work has already been begun on this building at Berlin. It is intended to be the central headquarters for the extensive

system of free post-graduate instruction which has been established throughout Germany in the last two or three years. There will be a permanent exposition of everything connected with medical technical instruction, including instruments, medical books, periodicals, and teaching appliances of all kinds. The collections on given subjects are to be loaned throughout the country, traveling from one post-graduate course center to another in turn.

Pilgrimage of Roman Catholic Physicians to Rome.—April 5 a party of 200 Roman Catholic physicians from all parts of France started from Lille in a special train for Rome. Others joined them on the way from Germany, Holland, Spain, Belgium and Italy, forming a total of 300 physicians who attended in a body the festivities at St. Peter's in honor of the thirteenth centennial of the originator of the Gregorian chant. It had been intended to exhibit at the evening scientific session a number of the persons claimed to have been miraculously cured at Lourdes, but it was decided to have merely a [illegible] by Dr. Boissarie.

[illegible] Proctologic Society.—In the list of officers of this [illegible] THE JOURNAL, June 18, page 1631, the name of Dr. Lewis H. Adler, Jr., Philadelphia, was given incorrectly.

Panama Physicians.—It is announced that 50,000 men will work on the Isthmus of Panama, and 200 physicians, most of them young men fresh from hospital life, will be employed.

Journal Changes.—The Arkansas Medical Society has commenced the publication of a monthly under the title of the *Monthly Bulletin of the Arkansas Medical Society*. The initial number consists of but eight pages and cover, but it is full of good things. The title, however, is a rather awkward one.——The *Bulletin of the Kentucky State Medical Society* has changed its name and hereafter will be known as the *Kentucky Medical Journal*.——The *Sanitarian* has been merged into the *Popular Science Monthly*.

Serum Inspection Report.—As provided in an Act of Congress approved June 1, 1902, to regulate the sale of viruses, serums, toxins and analogous products in the District of Columbia, to regulate interstate traffic therein, and for other purposes, regulations were prepared under the direction of the Secretary of the Treasury, and became effective Aug. 21, 1902. Since that time inspections have been made, as provided by Section 3 of the Act, of the manufacturing concerns whose products were on sale throughout the United States. The inspections, as required by the regulations formulated under this law, were made by officers of the Public Health and Marine-Hospital Service, and the products so purchased in the open market were examined in the Hygienic Laboratory of the service. The following establishments have been inspected and licensed:

FIRM.	PRODUCTS.
Parke, Davis & Co., Detroit	Vaccine virus, serums and toxins.
H. K. Mulford Co., Philadelphia	Vaccine virus, serums and toxins.
Dr. H. M. Alexander & Co., Marietta, Pa.	Vaccine virus and diphtheria antitoxin.
Pennsylvania Vaccine Co., Conewago, Pa.	Vaccine virus.
Field Vaccine Co., Milwaukee	Vaccine virus.
Pecuno Laboratories, Swiftwater, Pa.	Vaccine virus.
National Vaccine Establishment, Washington, D. C.	Vaccine virus.
Frederick Stearns & Co., Detroit	Diphtheria antitoxin and antistreptococcus serum.
Frederick Stearns & Co., Detroit	Vaccine virus.
Pasteur Institute, Paris, France	Viruses (other than vaccine), serums, toxins, and analogous products.
Chemische Fabik auf Action (vorm E. Schering), Berlin, Germany	Diphtheria antitoxin and antistreptococcus serum.
National Vaccine and Antitoxin Establishment, Washington, D. C.	Diphtheria antitoxin.

The examinations failed to reveal any contaminating organism or foreign toxin in the diphtheria antitoxins and disclosed a marked improvement in the quality of vaccine virus sold in open market, some samples being entirely free from pathogenic or pyogenic organisms, and all samples showing progressive improvement.

Examination for Army Medical Service.——The examination of applicants for commission in the Medical Corps of the Army has been materially modified. Immediate appointment of applicants after successful physical and professional examination will be discontinued; after July 1, 1904, applicants will be subjected to a preliminary examination and a final or qualifying examination with a course of instruction at the Army Medical School in Washington intervening. The preliminary examination will consist of a rigid inquiry into the physical qualifications of applicants and written examination in the following subjects: Mathematics (arithmetic, algebra and plain geometry), geography, history (especially of the United States), Latin grammar and reading of easy Latin prose, English grammar, orthography, composition, anatomy, physiology, chemistry and physics, materia medica and therapeutics, normal histology. The subjects in general education are essential and can not be waived. The preliminary examination will be conducted concurrently throughout the United States by boards of medical officers at convenient points; the questions submitted to all applicants will be identical, thus assuring a thoroughly competitive feature, and all papers will be criticised and graded by an army medical board in Washington. Applicants who attain a general average of 90 per cent. and upward in this examination will be employed as contract surgeons and ordered to the Army Medical School for instruction as candidates for admission to the Medical Corps of the Army; if, however, a sufficient number of applicants attain the required average they will be selected according to relative standing in the examination, the number will be pointed according to relative standing in the examination. The course of instruction at the Army Medical School will consist of lectures and practical work in subjects peculiarly appropriate to the duties which a medical officer is called on to perform. While at this school the students will be held under military discipline, and character, habits and general department closely observed. The final or qualifying examination at the close of the school term will comprise the subjects taught in the school, together with the following professional subjects not included in the preliminary examination: Surgery, practice of medicine, diseases of women and children, obstetrics, hygiene, bacteriology and pathology; general aptitude will be marked from observation during the school term. A general average of 90 per cent. in this examination will be required for appointment, and candidates attaining the highest percentages will be selected for commission to the extent of the existing vacancies in the medical department. Candidates who attain the requisite general average who fail to receive commissions will be given certificates of graduation at the school, and will be preferred for appointment as medical officers of volunteers or for employment as contract surgeons; they will also be given opportunity to take the qualifying examination with the next succeeding class. It is thought that, for the present at least, the number successfully passing the preliminary examination will be greater than can be accommodated at the Army Medical School, and that the number qualifying for appointment will exceed the number of vacancies. If, however, the class of candidates qualifying should be larger than reasonably thought, the young physicians who fail to receive commissions will not have wasted their time, as the course of instruction at the school, while in a large measure specialized to Army needs, is such as will better fit them for other professional pursuits, and furthermore they will have received a fair compensation while under instruction. Admission to the preliminary examination can be had only on invitation from the Surgeon General of the Army, issued after formal application to the Secretary of War for permission to appear for examination. No applicant whose age exceeds thirty years will be permitted to take the examination, and the authorities at the War Department desire it distinctly understood that this limit of age will be rigidly adhered to. Hospital training and practical experience are essential requisites, and an applicant will be expected to present evidence of one year's hospital experience or its equivalent (two years) in practice. The first preliminary examination will be held about August 1; those desiring to enter should at once communicate with the Surgeon General of the Army, Washington, D. C., who will be pleased to furnish all possible information.

Correspondence.

So-Called Synthetics and Ethical Nostrums.

PHILADELPHIA, June 28, 1904.

To the Editor:—The printing of another installment of false statements by Dr. Wm. J. Robinson, is the reason of this reply.

In the first place, I never asked the question: "If thermol is nothing but impure acet-phenetidin, how did he (meaning me) obtain a patent on it?" My former letter in the issue of April 30 will expose this misstatement. The government has

allowed me these different patents on the chemical combination of acetic and salicylic acids with phenetidin; as well as patents on twenty odd other definite chemical compounds, and in not one of them is there mention of a trade name—a custom followed by foreigners.

This subject of infringement is quite musty and absurd. The owners of the phenacetin patent undertook to prove it in 1901, and dropped it. Thermol is a chemical combination of acetic and salicylic acids with phenetidin.

As to impurity, the subject on which he is unable to specify, my former letter showed that by washing thermol thoroughly in a solution of muriatic acid—which instantly combines with free phenetidin and makes the same very soluble in water—that then all the poisonous and heart depressing qualities are washed away.

On the subject of iodomuth, the critic first stated that: "According to analysis, it is merely bismuth gallate, with a small quantity of free gallic acid; no iodin could be traced in the [illegible] and the iodin is so firmly bound to the molecule that it can not be demonstrated by any ordinary chemical reagents." Having had rope enough he now exposes "the black flag in business." Iodomuth contains no free iodin in an irritating form. It does contain sufficient iodin to be a practical useful chemical. All iodin bearing products do not depend for their activity on the fact of the iodin being *in statu nascendi*. Why could not the critic detect the presence of iodin in iodomuth? Is it because his knowledge is so deficient? or, is he carrying "the black flag in business." Prof. C. P. Grayson, of the University of Pennsylvania, when he referred to iodomuth in his treatise on "Diseases of the Nose, Throat and Ear"; the renowned von Ruck, who has reported the saving of lives by its use, and many other physicians, who are not chemists and make no pretense to be, have common sense enough to detect the physiologic action of iodin, and to readily prove its presence in a visible manner by the mere dissolving of iodomuth in nitric acid solution, and at once obtaining the blue iodin reaction with a solution of starch. There is not a specimen of iodomuth to be found in the country that will not give the iodin reaction when so tested.

"*Falsus in uno, falsus in omnibus*" was the reason put forth by the critic for slurring iodomuth before investigating it. After such a virulent false statement, which his ignorance of chemistry can not excuse, can any reliance be placed on his statement about ur-a-sol, or acetyl-methylene-di-salicylic acid? Under the heading of thermol he states that the melting point is quite a physical test. The difference in the melting point between ur-a-sol and the plain methylene-di-salicylic acid is about 200 F., or the difference between the freezing and the boiling points of water. With such a remarkable deficiency of observation, is it any wonder that the critic could not detect the presence of an acetyl group? I could tell him some more, but this is not a chemical journal.

My previous answer shows that I shirked no issue in regard to ur-a-sol. I asked what impurity it contained This the critic can not answer. I cited an authority of character, who had demonstrated the presence of an acetyl group. I also referred to the inability of the critic to produce "methylene salicylic acid."

The critic's rank egotistical statement "My analyses are so perfect, my statements are so incontrovertible," is so ridiculous that he exposes his purpose—"the black flag in business."

When you come to a knowledge of the reason for these attacks you will understand why the critic so signally failed to keep truth by his side. His betrayal of the courtesy of the American Medical Association will reap its own reward. "You can not fool all the people all the time." Nor can the certain foreign chemical houses with offices in New York City stop me from making thermol, iodomuth, ur-a-sol, or guaiolin nor any of the other organic chemicals which I have created.

S. LEWIS SUMMERS,
General Manager of the Organic Chemical Manufacturing Company and President of the Liberty Chemical Company.

[This correspondence must now stop.—ED.]

Sanatoria for Consumptives.

OTTAWA, ILL., June 20, 1904.

To the Editor:—It is apprehended that the greatest obstacle we will encounter in securing an appropriation for state sanatoria will be the difficulty in convincing the public in general, and legislators in particular, that tuberculosis can be cured in this climate. The belief that certain attributes of the atmosphere, such as rarity, dryness, equable temperature, etc., etc., are necessary, has become so firmly established that it need not be surprising if we find it difficult to convert the skeptical to a contrary belief.

In anticipation of this obstacle, it is the opinion of those who have given the subject most attention that an object lesson, which shall demonstrate the improvement or cure of a few cases in this climate, will have greater weight than an argument based on what has been done for a multitude of cases in other states. With this end in view, I have been induced to start a tent colony at Ottawa.

The site selected is ideal in every respect for the approach and [illegible] treatment of tuberculosis. It is on a high bluff overlooking the City of Ottawa, the Illinois and Fox River valleys, in the midst of some of the most beautiful scenery of this justly-famous region. The water supply is excellent and drainage perfect; it is easily accessible by trolley cars; the camp will be lighted by electricity and connected by telephone; milk will be supplied from the dairy, one-quarter mile distant; there is an abundant supply of fresh eggs, fruits and vegetables in the immediate vicinity—in fact, everything is present to make tent life not only comfortable, but even luxurious. The tents will be large and of the best material, thus insuring protection from the elements. Trained nurses and other help will be provided.

It is not intended to demonstrate how cheaply patients can be maintained, but how comfortably and well; therefore, those of the better class need have no hesitancy about making application for admission. In fact, this is the class whom we are seeking to secure.

The expense to patients will be the actual cost of maintenance, no charge being made for medical services. The service will be equal to that of a first-class hospital. It is estimated that it will cost $10 per week to maintain patients according to the standard which has been established. The cost of equipment is included in this estimate. Those familiar with hospital management will appreciate the reasonableness of the above estimate, particularly in view of the fact that these patients must be provided with the most nutritious and highest-priced food in much larger quantities than is required for the normal person. I have been much embarrassed by the report that has been published stating that the cost will be about $18 per month. For obvious reasons this is impossible. The statement did not originate with me.

In order to make the demonstration most effective in influencing the next legislature, it is desirable to commence immediately. Those interested in this work will confer a great favor by assisting me in securing a few patients at once. The success of the experiment will be fully reported from time to time through the usual channels. Physicians, the friends of patients and others interested will be welcomed as visitors to the camp.

Inasmuch as my motives are not selfish, I ask the moral support of the profession in making this enterprise a success.

J. W. PERRY,
Chairman Committee on Tuberculosis, Illinois State Medical Society.

Removal of the Normal Appendix When Exposed.

NEW YORK CITY, June 14, 1904.

To the Editor:—In the discussion at the Atlantic City session on the removal of normal appendices in the course of other work, I opposed the idea on three points: Removal of the appendix delays the other operation, adds a little to the danger, and, if the idea is taught by competent men, it will be carried out by those who will manage to get a death rate out of it. Immediately after the meeting I joined a group of physicians

who expressed surprise at my stand, and who said that they were under the impression that I favored the removal of normal appendices anyway, as a prophylactic measure to be applied generally. As with other surgeons, a good many stories about me and my work "go the rounds," and many of them have a basis of fact. I would not correct any that are amusing, or simply injurious to me personally, but when a cause is at stake, and when one may be quoted as authority, it is best perhaps to say that I have never, in speaking or writing, advocated the removal of the normal appendix. "Leave the appendix alone until it is infected, and then lose no time in having it inspected" is the couplet that expresses my views. If we are to get the lowest possible death rate in any sort of surgical work, we must let the patient off with the least attack of surgery that is possible, under the guidance of a good sense of proportion.

It is the little things in surgery that make the differences in statistics, precisely as in a commercial house, and the one who eliminates the greatest number of fatiling elements of loss in the end who is likely to be most successful. Besides the reasons given above against the removal of a normal appendix, from another standpoint the idea is impracticable, because there are few mothers who would take a fine, healthy boy away from his toys and carry him to the surgeon with instructions to "please cut my darling a little," and older people who go about on their own responsibility seeking to have the appendix removed are for the most part those who need attention for a psychosis. We all see a case of this sort now and then, but I doubt if there is in New York a single surgeon of responsible position who could be persuaded to operate for the purpose of removing a healthy appendix. Perhaps the thought that I advocate it has been reached by a sort of *reductio ad absurdum* from the proposition to have appendicitis work done through short incisions. My contention is simply this: We are to make as long an incision as is really necessary, a foot long if one needs it, but one should do the most difficult work with very little surgery if one has trained himself to do that. A formula that is going the rounds and that has been ascribed to me, "An inch and a half, a week and a half, an instrument and a half, and a dollar and a half," has been made up by others as a bit of fun, based on my use of the first two parts some time ago, and even the second part was added by one of my house surgeons at the hospital.

Yours truly, ROBERT T. MORRIS.

The Prophylaxis of Tetanus.

BENSONTON, N. J., June 18, 1904.

To the Editor:—An article in THE JOURNAL, June 18, regarding the prophylaxis of tetanus leads me to suggest a method of cleansing all punctured wounds by nails and splinters, as well as those caused by Fourth of July foolish exuberance. For years I have used hydrogen dioxid solutions diluted with sterile water made alkaline by sodium bicarbonate, or have used them alternately. As the tetanus bacillus is anaërobic, theoretically the oxygen given off would be deterrent; secondly, I have found that if used freely all foreign matter will be removed, usually without curetting, although this may be done if necessary. Caustics are unnecessary, often harmful. A more sensible packing would be loose gauze, with glycerin to promote exosmosis and drainage. The wound should be cleansed with hydrogen dioxid several times daily.

THOMAS G. DAVIS.

Queries and Minor Notes.

ANONYMOUS COMMUNICATIONS will not be noticed. Queries for this column must be accompanied by the writer's name and address, but the request of the writer not to publish his name will be faithfully observed.

MATERNITIES FOR THE UNMARRIED.

———, WIS., June 18, 1904.

To the Editor:—Will you please let me know through THE JOURNAL if there are any respectable places in Chicago, Milwaukee or the twin cities where an unfortunate daughter of respectable parents can be confined and the assured her child will be adopted in the private home of a good family? Addresses and approximate cost would be greatly appreciated. I feel very strongly that it is in every way much better for an unfortunate good girl to be confined secretly in a good place—not a "baby farm" or "angel factory"—than to have her unfortunate condition known among her friends and she and her unfortunate innocent babe forever disgraced. What is the opinion of most physicians who have given this subject serious thought? L. I. C.

ANSWER.—There can be no question "that it is in every way much better for an unfortunate good girl to be confined secretly in a good place than to have her unfortunate condition known among her friends." Sufficient suitable provision for this purpose is also necessary to combat the crime of induced abortion. Respectable and competent physicians should provide such places so that unfortunate and helpless girls may not be at the mercy of "baby farms." There is now no difficulty in finding good care for the mother before, during and after confinement. In any large city any good hospital that receives obstetric cases will furnish as good care as can be desired. In Chicago, St. Luke's, Mercy, Wesley, Presbyterian, West Side, German, Passavant and probably other general hospitals have obstetric departments under the charge of competent men. The Chicago Lying-in and Chicago Maternity hospitals also have some arrangements for private as well as for charity cases. The usual rates are $8.00 per week for ward cases and from $15.00 up for private rooms. All physicians engaged in the practice of obstetrics as a specialty, like the teachers of obstetrics in the medical colleges, are in the habit of making arrangements for such cases. No doubt similar facilities can be found in Milwaukee and St. Paul and all other large cities. The chief difficulty is in providing for the baby. It is the established policy of all charitable institutions organized for the purpose of caring for women and children to insist on the recognition by the mother of her duties and responsibilities so far as to agree, if possible, to nurse the child for at least a few months. It is well known that the mortality of illegitimate children is greatly reduced if they are fed breast milk in their first infancy. Hence the Illinois Children's Home and Aid Association, which is the recognized institution in Illinois for this purpose of finding homes for all helpless children, makes this an essential condition for its aid. If the mother has no milk, or if she is sickly, or if there are other convincing reasons why she can not do this much for her child, the society will take charge of it at once. Poor women are cared for, with their babies, in the Foundlings' Home or by the Salvation Army. Those who are able to pay are found homes in respectable private houses, where the charge would be from $6.00 to $10.00 per week. This period of nursing is important for other reasons. It not only secures a strong and healthy baby and allows time to find for it a good home, but it also enables the mother, when under good care, to recuperate from her pregnancy and labor. The normal puerperium, counting till the genital organs regain their normal condition, lasts, as we know, eight to twelve weeks. It is no harm to a girl who has passed through the anxieties of an illegitimate pregnancy to spend a few months in recuperation. For special cases there are in Chicago respectable institutions like St. Vincent's Orphan Asylum or Chicago Maternity Hospital and Training School for Nursery Maids that will take new-born infants to board for $3.00 to $5.00 a week and will seek to get them adopted, and similar arrangements can be found in nearly all large cities. In a large city there is also the possibility of finding a home for a healthy baby of good parentage through the medium of the advertising columns of the daily newspapers. With the co-operation of the mother and her parents an experienced obstetrician can manage a case of the kind very satisfactorily and for the best interests of child, mother, family and society.

THE ST. LOUIS FAIR.

SYLVA, N. C., June 20, 1904.

To the Editor:—Will you kindly give information through THE JOURNAL relative to opportunities at the St. Louis World's Fair for medical men to study and observe in matters pertaining to the practice of medicine and surgery? GEO. P. EDWARDS.

ANSWER.—Besides the local hospitals, dispensaries and medical institutions the World's Fair presents a number of exhibits of practical interest to physicians. In the German section of the Educational Building there is a large collection of models in wood and wax of various morbid conditions, of operations and of a normal histologic and anatomic character. There is a large collection of pathologic specimens in alcohol, formalin and Kaiserling, demonstrating the widest range of pathologic conditions. The different varieties of bacteria are shown in cultures. In the same building is shown the pathologic exhibit of St. Louis, comprising a collection of pathologic preparations in Kaiserling anatomic specimens, bacteria in cultures—all shown in cases permitting a good view of every feature of the exhibit. In the same section the Illinois University shows a collection of anatomic, of histologic and pathologic specimens. Harvard University, St. Louis University, Washington University, Columbia University, the University of Missouri and Johns Hopkins University show many specimens illustrative of the research and the method of teaching done in these institutions, while many other universities and medical colleges show some important features of their medical instruction. In the electricity building are shown, step by step, many chemico-electric processes.

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A BOOK OF PORTRAITS OF PHYSICIANS.

Several of our readers have written us concerning a circular letter that is being sent to those who registered at the Atlantic City session of the American Medical Association. In this the concern asks for portraits, which are to be "beautifully printed on fine coated paper and handsomely bound in cloth at $1, and in leather de luxe at $2." The letter states that the work is "to contain life-like portraits of leading members from all sections." One of our correspondents asks us if it is a fact that the leading members of the profession will have their portraits in this book. We imagine that all who subscribe for the book and send their portraits will find that they will be accommodated, but whether those who are considered as the "leaders in the profession" will be among the patrons we do not know. We would suggest that those who send their portraits wait until they see the book before they pay $1 or $2 for it. We also call attention to the printed order blank which is to be signed, ordering the engraving made. No charge for this is named, and there is the possibility of the charge being any amount the company wishes.

WATER STERILIZATION BY COPPER.

NEW BEDFORD, MASS., May 23, 1904.

To the *Editor*:—Will you kindly inform me what is the process of filtering or sterilizing water by sulphate of copper?

M. H. DE LAVOL, M.D.

ANSWER.—This inquiry apparently relates to a method recently proposed for destroying or preventing the growth of algæ and certain pathogenic bacteria in water supplies. The experimental evidence in favor of the method is contained in Bulletin No. 64, Bureau of Plant Industry, U. S. Department of Agriculture, and is based largely on work by G. T. Moore and E. F. Kellerman. These authors state that copper sulphate in a dilution as great as to be colorless, tasteless and harmless to man is sufficiently toxic to algæ to destroy them or to prevent their appearance. They also assert that at ordinary temperatures one part of copper sulphate to 100,000 parts of water destroys typhoid and cholera germs in from three to four hours. Other details are given in the bulletin cited.

ECZEMA TREATMENT.

DANVILLE, KY., June 13, 1904.

To the *Editor*:—Please state treatment, internal and external, for chronic eczema of scalp; also for psoriasis of scalp.

JOHN D. JACKSON.

ANSWER.—There is no rule that can be applied to the treatment of chronic eczema, either of the scalp or other location. The existing cause must be considered and eliminated. The only one rule that applies is stimulation in chronic cases, followed by soothing application to the affected parts. This is the only rule that will apply to all cases. This answer also applies to psoriasis.

METHYL BLUE DISTINCT FROM METHYLENE BLUE.

———, IOWA, June 22, 1904.

To the *Editor*:—What difference, if any, exists between methylene and methylene blue?

M. L. N.

ANSWER.—The two are different substances. Methyl blue, or diphenylamin blue, has the formula $NC_6H_4-N_2C_6O_4$ and is an antiseptic used as a local application in diphtheria. Methylene blue, or methylthionin, has the formula $C_{16}H_{18}N_3SCl$, is a derivative of diphenylamin and is the familiar histologic stain. It is also used as an analgesic in rheumatic and neuralgic pains and as an antiperiodic in malaria.

THIOSINAMIN IN OCCLUSION OF SEMINAL DUCTS.

NEW ORLEANS, May 29, 1904.

To the *Editor*:—1. Will you kindly inform me if in the reports submitted regarding thiosinamin any one has used it in occlusion of the seminal ducts resulting from mumps or other cause? 2. What is your opinion of its utility in such cases of long standing?

V.

ANSWER.—1. Thiosinamin has not been used in this class of cases so far as we have been able to find from the literature. 2. We doubt its value.

RUM AND PLANTAINS.

A CORRESPONDENT writes: It is asserted by some that rum (or whisky) and plantains taken into an otherwise empty stomach in sufficient quantities form a poison which is generally fatal. Can you give any information regarding the assertion?

ANSWER.—Since our correspondent says "in sufficient quantities," we agree that a fatal poison may result from the alcoholic extract thus liable to be produced. We have not heard of the occurrence.

ARSENIC ON EPITHELIOMA.

A CORRESPONDENT asks how arsenic acts on epitheliomas. In the treatment of epitheliomas arsenic has been abandoned. The recognized treatment of the day is either *x*-ray or radical surgical interference.

Miscellany.

WORLD'S FAIR CONGRESS.

The Medical Department of the Congress of Arts and Science at the St. Louis Exposition.

This Congress is primarily a congress of scholars rather than of specialists. It is divided into twenty-four departments, one of the strongest of which is that on "Medicine." Yet, it is not intended to be a distinctly medical assemblage, but a congress of medical scholars. Professor Simon Newcomb, president of the congress, gives us the following outline of the program:

The Department of Medicine will be opened Tuesday, September 20, under the chairmanship of Dr. William Osler, with two general addresses by Dr. W. T. Councilman of Harvard Medical College, and Dr. Frank Billings of Rush Medical College: One on the progress of medicine during the past century, and the other on its fundamental conceptions. The Department of Medicine is divided into twelve sections. On Wednesday morning, September 21, a section on public health will meet under the presidency of Dr. Walter Wyman, surgeon general of the U. S. Marine-Hospital Service. It will be addressed by Prof. W. T. Sedgwick of the Massachusetts Institute of Technology and Dr. Ernst J. Lederle, formerly commissioner of health of New York City. A section of laryngology and otology will meet at the same time: Chairman, Dr. Glasgow, St. Louis; principal speakers, Sir Felix Semon, London, physician extraordinary to the king, and Dr. J. Solis-Cohen, Philadelphia.

In the afternoon a section on preventive medicine will meet, under the chairmanship of Dr. J. M. Mathews, president of the Kentucky Board of Health. It will be addressed by Profs. Ronald Ross of Liverpool, and Celli of Rome.

On the same afternoon, a section on pediatrics will meet under the chairmanship of Dr. Rotch and will be addressed by Escherich of Vienna, Jacobi of New York, and others.

On Thursday morning there will be meetings of sections on pathology and psychiatry. The chairmen of these sections are Drs. Simon Flexner and Edward Cowles. Marchand of Leipsic and Orth of Berlin accepted invitations to address the section on pathology, but it is not certain whether both will be able to attend. Psychiatry will be treated by Ziehen of Berlin and Dana of New York.

In the afternoon a section on neurology will meet under the chairmanship of Prof. L. F. Barker, Chicago, and will be addressed by Kitasato of Tokio and Putnam of Boston.

Other sections will meet on Friday and Saturday as follows:

THERAPEUTICS AND PHARMACOLOGY.

Chairman, Dr. Robert A. Hare, Jefferson Medical College.
Speakers, Sir Lauder Brunton, F.R.S. London, and Prof. Mathias H. O. Lothreich, University of Berlin.

INTERNAL MEDICINE—FRIDAY AFTERNOON.

Chairman, Prof. F. C. Shattuck, Harvard University.
Speakers, Prof. Clifford Allbutt, F.R.S. University of Cambridge, and Prof. William S. Thayer, Johns Hopkins University.

SURGERY—FRIDAY MORNING.

Chairman, Prof. Carl Beck, New York City.
Speaker, Prof. Frederic S. Dennis, Cornell Medical College, New York.

GYNECOLOGY—SATURDAY MORNING.

Chairman, Prof. Howard A. Kelly, Johns Hopkins University.
Speakers, Dr. L. Ombredanne, member of the Academy of Medicine, Paris, and Prof. J. C. Webster, Chicago.

OPHTHALMOLOGY—SATURDAY AFTERNOON.

Chairman, Dr. G. C. Harlan, Philadelphia.
Speakers, Dr. Edward Jackson, Denver, and Dr. George M. Gould, Philadelphia.

On the general plan of the congress, one of the two principal speakers in each section will treat of the relation of the subject to other departments of knowledge; and the other, of its present problems. Beside the principal speakers, it is expected that each section will receive several brief communications from leading members of the profession in attendance at the meeting.

Successor to Duclaux.—The board of trustees of the Institut Pasteur, Paris, comprises Brouardel, Grancher, Roux, Magnin, Chamberland and Metchnikoff. Roux will undoubtedly be made director with Chamberland and Metchnikoff as vice-directors.

American Medical Association.

Proceedings of the Fifty-fifth Annual Session, held at Atlantic City, N. J., June 7-10, 1904.

OFFICIAL MINUTES* OF THE SECTIONS.

As Rendered by the Respective Secretaries or Stenographers.

Section on Practice of Medicine.

TUESDAY, JUNE 7.

The Chairman, Dr. Alexander Lambert, appointed the following Nominating Committee: Dr. George Dock of Ann Arbor, Mich.; Dr. W. S. Thayer of Baltimore, and Dr. S. J. Meltzer of New York.

Dr. Edward F. Wells of Chicago was elected Delegate.

Chairman's Address, "The Adaptation of Pure Science to Medicine," by Dr. Alexander Lambert, New York.

"Pernicious Anemia, and Its Relation to Gastric Digestion, Based on Twenty-five Cases," by Dr. Charles G. Stockton, Buffalo. Discussed by Drs. Cabot, Einhorn, Jones, Osler, Hall, Dock and Stockton.

"Diagnosis and Treatment of Perforation in Typhoid Fever," by Dr. Morris Manges of New York. Discussed by Drs. Osler, Wilson and Manges.

"A Case of Typhoid Fever, with an Unusual Complication," by Dr. William B. Darnall of Atlantic City.

"Mortality and Management of Pneumonia," by Dr. Edward F. Wells of Chicago.

"The Study of a Series of Cases of Pneumonia," by Dr. Joseph Sailer of Philadelphia.

These two papers were discussed by Drs. Jenkins, Rochester, Babcock, Cohen, Wells and Sailer.

"Appendicitis from the Standpoint of a Physician," by Dr. S. G. Bonney, Denver.

"Suicides; Some Instructive Cases," by Dr. John L. Davis, Cincinnati.

WEDNESDAY, JUNE 8.

"Pathology of Arteriosclerosis," by Dr. William Welch.

"Arteriosclerosis from Acute Infectious Diseases," by Dr. W. S. Thayer.

"Arteriosclerosis of Syphilitic Origin," by Dr. C. Travis Drennen.

"Arteriosclerosis of Nephritic Origin," by Dr. George Dock.

"Arteriosclerosis Due to Lead," by Dr. Frank Billings.

"Arteriosclerosis of Alcoholic Origin," by Dr. Richard Cabot.

"Arteriosclerosis and Angina Pectoris," by Dr. William Osler.

"Treatment of Arteriosclerosis," by Dr. James M. Anders.

These eight papers were discussed by Drs. Stengel, Shattuck, Kraus, Stockton, Meltzer, Babcock, Weber, Reed, Sewell, McPhedran, Jacobi, Thayer and Cabot.

"A Study of 186 Cases of Mitral and Tricuspid Stenosis," by Dr. Duland and Dr. McDaniel.

"Pleural Effusions in Heart Disease," by Dr. Steele.

"Prolonged Delirium in Pericarditis and Endocarditis," by Dr. Green.

"Limitations of Digitalis in Mitral and Aortic Insufficiency," by Dr. Jones.

"Some Points in the Acoustics of Respirations," by Dr. Charles I. Quimby.

THURSDAY, JUNE 9.

"Etiology of Cholecystitis and Cholelithiasis," by Dr. Walter Bierring.

Dr. Eugene L. Opie being ill, it was moved that his paper, on "Relation of Cholelithiasis to Disease of the Pancreas," be referred to the Executive Committee, with the request that it appear in the proceedings of this Section. Motion carried.

"The Relation of the Gall-Bladder and Bile-Ducts, Etc." by Dr. B. W. Sippy.

"Diagnosis of Cholecystitis and Cholelithiasis," by Dr. Parker Syms.

"Treatment of Cholecystitis and Cholelithiasis," by Dr. L. W. Hotchkiss.

These four papers were discussed by Drs. Anders, Mayo, Thayer, Hemmeter, Billings, Tyson, Allen, Jones, Willson, Syms and Hotchkiss.

"Ergot in General Practice," by Dr. A. T. Livingston. Discussed by Drs. Montgomery, Stranahan, Grad, Walsh, Lambert, Taylor and Livingston.

The report of the Nominating Committee was adopted: Chairman, Dr. Richard Cabot of Boston; Secretary, Dr. J. L. Miller of Chicago.

"Differential Leucocyte Count as an Aid in the Diagnosis of Fevers," by Dr. W. Kraus. Discussed by Drs. Cabot, Willson, Grandy, Robertson and Kraus.

"Pathogenesis of Uremia and Eclampsia," by Dr. R. N. Willson. Discussed by Drs. Tyson and Willson.

"Amebic Dysentery," by Dr. J. P. Tuttle. Discussed by Drs. Turck, Warden, Marvel, Gant, Kraus and Tuttle.

"The Family Physician as a Factor in the Solution of the Tuberculosis Problem," by Dr. S. A. Knopf.

"Has Influenza Been a Causative Factor in the Increase of Appendicitis?" by Dr. Philip Marvel. Discussed by Drs. Rochester, Walsh, Russell, Morris and Marvel.

"Problems for the Tuberculous Convalescent," by Dr. A. Mansfield Holmes, Denver.

Section on Obstetrics and Diseases of Women.

TUESDAY, JUNE 7.

The Section was called to order at 2:15 p. m. by the Chairman, Dr. L. H. Dunning.

Dr. I. S. Stone was called to the chair, and the Chairman delivered his address on "Last Year's Progress in Gynecology; Senile Endometritis."

Dr. John A. Sampson read a paper entitled, "The Invasion of Carcinoma Cervicis Uteri into the Surrounding Tissues."

Dr. Charles P. Noble followed with a paper entitled, "Further Experience in the Use of the Electrothermic Clamps in the Treatment of Cancer of the Uterus."

Dr. Palmer Findley contributed a paper on "Primary Chorio-Epithelioma Malignum Outside of the Placental Site."

These three papers were discussed by Drs. Wathen, J. G. Clark, G. B. Massey, L. Smith, Lawrence, Humiston, Chandler, Sandberg, Goldspohn, Carstens, Downs, Cary, Thienhaus, Sampson, Noble and Findley.

On motion, the Chairman appointed the following committee to draft resolutions on the death of Dr. J. M. Duff: Drs. J. H. Carstens, C. L. Bonifield and Simpson.

The Chairman appointed the following Nominating Committee: Drs. Newman, Carstens, Dudley, Dorsett and Bacon.

Dr. H. O. Marcy read a paper entitled, "The Technic of Wounds Incident to Laparotomy." Discussed by Drs. Goldspohn, Longyear, Dorsett and Marcy.

Dr. Daniel H. Craig read a paper on "Clinical Experience with the Appendiculo-Ovarian Ligament."

WEDNESDAY, JUNE 8—MORNING.

The Section was called to order at 9:15 a. m. by the Chairman, Dr. Dunning.

The first paper of the morning was read by Dr. George Boyd, entitled, "Diagnosis and Treatment of Pelvic Deformity." Discussed by Drs. Bacon, Wise, Carey and Boyd.

Dr. C. S. Bacon followed with a paper on "Heart Disease as an Obstetric Complication." Discussed by Drs. Holmes, Hotchkiss, Carey, Grad, Hastings and Bacon.

The Committee on Resolutions on the death of Dr. J. M. Duff reported as follows, and the report was adopted:

WHEREAS, In the order of nature there has been removed from our midst, in the prime of vigorous manhood, our distinguished friend and co-laborer, John Milton Duff,

Resolved, That in the death of Dr. Duff this Section has lost one of its most active and valued members, the profession a constant and hard worker for its elevation and progress.

Resolved, That we tender to his family our profound sympathy.

Resolved, That a copy of these resolutions be sent to his bereaved family, and that they be published in THE JOURNAL.

Dr. Cullen, representing the Reed Memorial Fund, was present and a collection for the fund was taken up.

Dr. H. G. Wetherill read a paper on "The Difficulties and Dangers of Accouchement Forcé; A Simple, Safe and Efficient Method." Discussed by Drs. Carstens, Holmes, Bacon, Hastings, Fry and Wetherill.

Dr. John F. Moran followed with a paper entitled, "Is Cesarean Section a Rational Method of Treatment in Placenta Previa?" Discussed by Drs. Harrison, Dudley, Lawrence, Holmes, Dorsey, Hastings, Fry, Truesdale, Stone and Moran.

WEDNESDAY, JUNE 8—AFTERNOON.

The Section was called to order by the Chairman at 2 p. m.

Dr. B. C. Hirst read a paper entitled, "The Primary, Intermediate and Secondary Repair of the Anterior Wall After Labor."

Dr. J. R. Goffe followed with a paper on "The Etiology and Pathology of Cystocele, with a New Operation for Its Relief."

Both papers were discussed by Drs. R. W. Holmes, M. Price, Chandler, Stone, Bovée, Burtenshaw, Hirst and Goffe.

Dr. J. H. Burtenshaw read a paper entitled, "Repair of Pelvic Floor Lacerations."

Dr. F. H. Wiggin contributed a paper on "Treatment of Complete Uterine and Vaginal Prolapse."

These two papers were discussed by Drs. Tucker, Pantzer, Noble, Longyear, Goldspohn, Craig, Harrison, Joseph Price, Goffe and Burtenshaw.

Dr. H. O. Pantzer read a paper on "Multiple Abscesses of the Omentum Following Grave Septic Peritonitis: Report of Two Cases."

THURSDAY, JUNE 9—MORNING.

The Section was called to order at 9:15 a. m. by the Chairman, Dr. Dunning.

The first paper was read by Dr. H. W. Longyear, entitled, "The Surgical Treatment of Bilocular Uterus and Bifid Vagina." Discussed by Drs. Bacon, Dunning, H. T. Johnstone, Carstens, Dorsett and Longyear.

Dr. J. W. Bovée contributed a paper on "A Plea for More Thorough Examination of Doubtful Specimens of Ectopic Pregnancy."

Dr. W. B. Dorsett followed with a paper entitled "Some Cases of Ectopic Gestation, with Atypical Symptoms."

These two papers were discussed by Drs. Carstens, Lawrence, Massey, Goldspohn, Humiston, Stone, Brickner, Dudley, Bacon, Bovée and Dorsett.

Dr. A. Palmer Dudley read a paper on "The Influence of Ovarian Implantation on Menstruation in Women."

Dr. J. W. Cokenower read a paper entitled "A Plea for Conservative Operations on the Ovaries, from a Neurotic Standpoint, with Report of Cases."

These two papers were discussed by Drs. Morris, Goldspohn, Humiston, Bacon, Lawrence, Marcy, Massey, Carstens, Craig, Chandler, Dudley and Cokenower.

THURSDAY, JUNE 9—AFTERNOON.

The Section was called to order at 2:15 p. m.

The Nominating Committee reported as follows: Chairman, Dr. Charles L. Bonifield, Cincinnati; Vice-Chairman, Dr. F. F. Lawrence, Columbus; Secretary, Dr. Walter P. Manton, Detroit; Delegate, Dr. J. Wesley Bovée, Washington; Alternate Delegate, Dr. H. O. Pantzer, Indianapolis. On motion, the report of the committee was adopted.

Dr. T. S. Cullen read a paper on "A Series of Mistaken Diagnoses."

Dr. J. H. Carstens read a paper entitled "Some Further Observations on the Use of the Stem Pessary for Scanty and Painful Menstruation."

Dr. H. A. Kelly contributed a paper on "Injury to the Rectum in the Gynecologic Examination." This paper was discussed by Drs.

*The minutes of the House of Delegates appeared in THE JOURNAL, June 11, pages 1574-1582, and June 18, pages 1634-1647; the minutes of the General Meetings, June 18, pages 1647-1649, and June 25, pages 1676-1687.

Cullen, Lawrence, Shoemaker, Wetherill, Noble, Brickner and Kelly.

Dr. F. A. Higgins followed with a paper on "The Propriety, Indications and Methods for the Termination of Pregnancy." Discussed by Drs. Hall, Bacon, Holmes and Higgins.

Dr. J. C. Applegate read a paper entitled "Adherent Uterus as a Complication of Labor, Citing Two Cases." Discussed by Drs. Craig, Shoemaker, Dunning, Dorset, Fry, Lawrence and Applegate.

Dr. F. F. Lawrence read his paper on "Membranous Endometritis." Discussion by Drs. Dunning, Bonifield, Fisher and Lawrence.

Dr. G. E. Shoemaker contributed his paper entitled "Management of the Acute Infective Stages of Abdominal Inflammation." Discussed by Drs. Fisher, Dorsey, Dunning, Bonifield and Shoemaker.

On motion, a vote of thanks was extended to Dr. Dunning, the retiring Chairman.

The Chairman introduced Dr. Bonifield, the Chairman-elect, who expressed his gratification and thanks for the honor conferred, and then declared the Section adjourned *sine die*.

Section on Surgery and Anatomy.

TUESDAY, JUNE 7.

Chairman's address, by Dr. Charles A. Powers, Denver. Dr. De Forest Willard, Philadelphia, took the chair during the reading of the Chairman's address.

"The Danger of Allowing Warts and Moles to Remain, Lest They Become Malignant; with Twenty-five Illustrative Cases," by Dr. W. W. Keen, Philadelphia. Discussed by Drs. Rodman, Pfisterer, Weir, Laplace, Bevan and Keen.

At the suggestion of the Chairman, Professor Hoffa of Berlin was escorted to the platform by Drs. W. R. Townsend, New York, and H. Augustus Wilson, Philadelphia.

"Starvation. Operation for Malignancy in the External Carotid Area; Its Failures and Successes," by Dr. Robert H. M. Dawbarn, New York. Discussed by Drs. Crile, Bristow and Dawbarn.

"What Is the Proper Surgical Treatment of Suspicious Tumors of the Involuting Breast," by Dr. J. Clark Stewart, Minneapolis. Discussed by Drs. Jepson, Wharton, Bloodgood, Gibbons, Morris, Meyer and Stewart.

"The Influence of the Adipose Tissue, with Regard to the Pathology of the Knee Joint," by Prof. Dr. A. Hoffa, Berlin, Germany.

"Surgical Lesions of the Axillary Plexus," by Dr. John A. Wyeth, New York. Discussed by Drs. Murphy, Brickner, Holmes and Summers.

"The Matas Treatment of Aneurism," by Dr. J. F. Binnie, Kansas City. Discussed by Drs. Matas, Murphy, Pantzer and Binnie.

The Secretary announced the change of meeting place for the Section another.

WEDNESDAY, JUNE 8—MORNING.

It was moved that the Executive Committee act as a Nominating Committee. Carried.

"Twine in Lieu of the Elastic Ligature for Performing Gastroenterostomy," by Dr. J. W. Draper Maury, New York City.

"Remarks on the Disadvantages of the Murphy Button," by Dr. Robert F. Weir, New York City.

"Excision of the Ulcer-Bearing Area in Gastric Ulcer," by Dr. William L. Rodman, Philadelphia.

These three papers were discussed by Drs. Ochsner, Mayo, Murphy, Dawbarn, McArthur, Dudley, McRae, Lloyd, Maury, Weir and Rodman.

"Rupture of Mesenteric Glands During Typhoid Fever, Simulating Intestinal Perforation; Report of a Case, with Operation and Recovery," by Dr. Robert G. Le Conte, Philadelphia. Discussed by Drs. Hammond, McArthur, Eisendrath and Thomas.

"Excision of a Part of the Ileum and All of the Cecum and Ascending Colon; Ileum and Transverse Colon United by a New Method," by Dr. J. Shelton Horsley, Richmond. Discussed by Drs. Smith, Ochsner, Connell and Horsley.

WEDNESDAY, JUNE 8—AFTERNOON.

"A Case of Retroperitoneal Fibrolipoma," by Dr. George Ben Johnston, Richmond. Discussed by Drs. Allaben and Johnston.

"The Surgery of the Biliary Tract, Especially the Indications for Operation and the Importance of Drainage," by Dr. Maurice H. Richardson, Boston.

"Gallstones in the Common Duct," by Dr. Archibald MacLaren, St. Paul, Minn.

These two papers were discussed by Drs. Bryant, Thienhaus, Moore, Laplace, Mayo, Bloodgood, Richardson and MacLaren.

"Appendicitis in Children," by Dr. A. J. McCosh, New York City.

"The Diagnosis of Appendicitis. Should the Appendix Be Removed when the Abdomen Is Opened for Other Conditions?" by Dr. Floyd W. McRae, Atlanta, Ga.

"Factors in the Mortality of Appendicitis," by Dr. John B. Deaver, Philadelphia.

These three papers were discussed by Drs. Laplace, Summers, Jr., Hupp, Jacobi, Marcy, Wathen, Ochsner, Murphy, J. Price, Morris, M. Price and Deaver.

THURSDAY, JUNE 9—MORNING.

"The Anatomy of Inguinal Hernia, and Andrews' Operation for Radical Cure," by Dr. D. N. Eisendrath, Chicago.

"Three Years' Experience with the Autoplastic Suture for Hernia," by Dr. L. L. McArthur, Chicago.

These two papers were discussed by Drs. Coley, Andrews, Stokes, Bloodgood, Marcy, Bevan, De Garmo, Walker, Leonard, Holmes, Eisendrath and McArthur.

"Surgery of the Trifacial Nerve and Its Ganglia," by Dr. John B. Murphy, Chicago.

"Intracranial Neurectomy for Trigeminal Neuralgia; Cases and Comments," by Dr. Harry M. Sherman, San Francisco.

"Summary of the Final Results of Four Cases of Division of the Sensory Root for Tic Douloureux," by Dr. Charles H. Frazier, Philadelphia.

These three papers were discussed by Drs. Mills, Spiller, Weir, Shelton, Horsley, Cushing, Murphy, Sherman and Frazier.

"Laminectomy; A Further Contribution," by Dr. John C. Munro, Boston. Discussed by Drs. Lund and Cushing.

"Treatment of Cold Abscesses and Sinuses in Tuberculous Disease of Bone," by Dr. V. P. Gibney, New York.

THURSDAY, JUNE 9—AFTERNOON.

The following officers were elected for the ensuing year: Chairman, Dr. Maurice Richardson, Boston; secretary, Dr. Floyd McRae of Atlanta; delegate, Dr. H. O. Walker, Detroit; alternate, Dr. James B. Bullitt, Louisville.

"Old Unreduced Dislocations," by Dr. De Forest Willard, Philadelphia. Discussed by Drs. Jonas, Thomas, Bevan, Blake, Vaughan, Lord, Powers and Willard.

"Conservative Perineal Prostatectomy; Report of Fifty Cases," by Dr. Hugh H. Young, Baltimore.

"Prostatic Obstruction," by Dr. Parker Syms, New York.

"Prostatectomy in General, Especially by the Perineal Route," by Dr. George Goodfellow, San Francisco.

"Is It Wise to Try to Make Any One Operative Method Apply to All Prostatectomies?" by Dr. Eugene Fuller, New York.

These four papers were discussed by Drs. Horwitz, Dawbarn, Munro, Tinker, Eisendrath, MacLaren, Young, Syms, Goodfellow and Fuller.

Dr. Deaver having declined the chairmanship of the Section, Dr. A. J. McCosh, New York, was elected in his stead.

"Kidney Stone; Diagnosis and Treatment," by Dr. A. D. Bevan, Chicago. Discussed by Drs. Leonard, Bullitt, Blake, Deaver, Young, Winslow, Thomas and Bevan.

FRIDAY, JUNE 10—MORNING.

Dr. Samuel Iglauer, Cincinnati, presented a new etherizing apparatus.

The Chairman introduced Dr. McRae, the new Secretary, who made a few remarks.

Dr. William L. Rodman, Philadelphia, moved that the Executive Committee be empowered to fill any vacancy that might occur in the officers of the Section between now and the meeting next year. Seconded and carried.

"The Treatment of Fractures of the Patella by Lateral Sutures," by Dr. Joseph A. Blake, New York. Discussed by Drs. Gibbons, Vaughan, Thienhaus, Binnie, Eisendrath, Bullitt, Lemon, Powers and Blake.

"Surgical Treatment of Certain Cases of Arthritis Deformans," by Dr. Martin B. Tinker, Ithaca. Discussed by Drs. Vaughan, Sherman and Tinker.

Dr. James B. Bullitt, Louisville, moved that a vote of thanks be extended to the outgoing officers of the Section. Carried, and Drs. Powers and Andrews replied.

"Impacted Fractures of the Neck of the Femur," by Dr. LeMoyne Wills, Los Angeles. Discussed by Drs. Sherman, Thomas, Rodman, Crane, Eisendrath, Bullitt, Fenner and Wills.

"Fat Embolism of Lung Following Fractures, with Report of Two Cases," by Dr. F. Gregory Connell, Leadville, Col. Discussed by Drs. McKenzie, Lemon, Jackson, Summers and Blake.

Section on Hygiene and Sanitary Science.

TUESDAY, JUNE 7.—AFTERNOON.

The Section was called to order by the Chairman, Dr. Gardner T. Swarts, Providence, R. I., who delivered his address.

It was moved by Dr. Lee that that portion of the Chairman's address which referred to the registration of vital statistics be furnished to the Board of Health of Pennsylvania for use in the campaign for effective legislation on the subject in that state. Carried.

"Dairy Hygiene, with Special Reference to Tuberculosis," by Dr. Richard Cole Newton, Montclair, N. J. Discussed by Drs. Bracken, Hare, Hurty, Sternberg, Egbert and Newton.

WEDNESDAY, JUNE 8.

The Section was called to order by the Chairman.

"Report of the Committee on Prophylaxis of Venereal Diseases," by Dr. Ludwig Weiss, New York.

"What Is the Right Attitude of the Medical Profession in Relation to the Social Evil?" by Dr. Howard A. Kelly, Baltimore.

"Syphilis as a Disease of the Innocent," by Dr. L. Duncan Bulkley, New York.

Dr. Henry E. Tuley, Louisville, Ky., read a paper on "Syphilis Affecting Infant Mortality."

"Gonorrhea Affecting the Female Genital Organs," by Dr. Joseph Taber Johnson, Washington, D. C.

"Purulent Conjunctivitis and Blindness," by Dr. Edward Jackson, Denver.

"Sanitary and Moral Prophylaxis of Venereal Diseases," by Dr. Prince Morrow, New York City. (By invitation.)

"Birth Rate and Decrease of Population Affected by Syphilis and Gonorrhea," by Henry D. Holton, Brattleboro, Vt. (A Report from the Conference of State and Provincial Boards of Health of North America.)

"Suggestions Concerning the Administrative Control of Venereal Diseases," by George M. Kober, Washington, D. C.

All these papers were then discussed by Drs. Egbert, Brockman, Brayton, Corwin, Carrier, Robin, Baker, Myers, Yeoman and Work.

Dr. Henry Baker, Michigan, moved that the papers read at the session, together with the discussion, be referred to a committee, with a view to obtaining the consent of the Association to the publication of the same in pamphlet form. Carried.

Dr. Seneca Egbert of Philadelphia moved that the Section endorse the report submitted to the Conference of State and Provincial Boards of Health, and the action taken by them, including the letter for distribution among physicians. Carried.

It was moved and seconded that the Board of Trustees of the American Medical Association be requested to apportion $200 for the work of the Committee on Venereal Diseases. Passed and referred to the Board of Trustees.

Dr. Ludwig Weiss, New York City, presented a resolution to the effect that the Section on Hygiene and Sanitary Science express its sympathy with the work of the Committee on Prophylaxis and Venereal Diseases, and its recommendation to form an American Society for Combating Venereal Diseases. The resolution was adopted.

Dr. L. Duncan Bulkley, New York City, offered a resolution to the effect that, inasmuch as syphilis and gonorrhea have been shown to be the cause of incalculable damage and danger to the health and life of the community, the American Medical Association is earnestly requested to call the attention of the profession to the

matter, and urge that the boards of health throughout the United States give serious attention to the matter, with a view to securing proper protection by legal measures against these diseases.

THURSDAY, JUNE 9—MORNING.

"A Study of the Economic Course of Consumption in Wage-Earners," by Dr. Marshall L. Price, Baltimore.

"The Present Status of the Antituberculosis Work in the United States," by Dr. S. A. Knopf, New York City.

These two papers were discussed by Surgeon-General Sternberg, Drs. Wilbur, Barrier, Browning, Bracken, Young, Hare and Knopf.

Dr. J. J. Kinyoun, Glenolden, Pa., contributed a paper containing the results of his microscopic examination of the furnishings of sleeping cars.

"Prevalence and Prophylaxis of Pneumonia," by Dr. Edward F. Wells, Chicago. Discussed by Drs. Sternberg, Kober, Fulton and Wells.

The following officers were elected for the coming year: Chairman, Dr. John Fulton, Baltimore; secretary, Dr. M. L. Price, Baltimore; delegate, Dr. Henry Mitchell; ex-officio member of Executive Committee, Dr. G. T. Swarts, the other members of the committee being Dr. Arthur R. Reynolds and Dr. H. M. Bracken.

THURSDAY, JUNE 9—AFTERNOON.

"Is Pneumonia Increasing?" by Dr. John S. Fulton, Baltimore. Discussed by Drs. Lee, Wilbur, Hurty, Kober and Fulton.

"What the Census Bureau is Doing to Improve the Registration of Vital Statistics in the United States," by Dr. Cressy L. Wilbur, Lansing, Mich. Discussed by Drs. Hebert, Browning and Wilbur.

Dr. Wilbur offered a resolution that the Section commend the resolution of the Associated Sanitary Authorities of Pennsylvania which declares the registration of vital statistics for Pennsylvania to be the most pressing object of attainment by the sanitary workers in that state. The resolution was adopted.

"How May Typhoid Fever Be Eliminated?" by Dr. A. Robin, Wilmington, Del.

"Some Typhoid Epidemics Studied by Laboratory Methods," by Dr. William R. Stokes.

Section on Ophthalmology.

TUESDAY, JUNE 7.

The meeting was called to order by the Chairman, Dr. Robert L. Randolph, Baltimore, at 2 p. m.

The Chairman appointed Dr. Casey A. Wood, Chicago, to serve in the place of Dr. Frank Allport, Chicago, as a member of the Nominating Committee, the committee then standing: Dr. John E. Weeks, Dr. J. A. Lippincott and Dr. Casey A. Wood.

The Chairman then delivered his address, the subject being "Thoughts Suggested by a Study of the Eye Injuries of Independence Day."

Dr. Myles Standish, Boston, read a paper on "The Treatment of Purulent Ophthalmia." Discussed by Drs. Wood, Ramsay, Calhoun, Todd, Weeks, Woods, Seabrook, Thompson, Richey, Parke, Black, Stevenson, Connor, Holt and Standish.

"Post-Operative Infection of the Eye," by Dr. J. A. White, Richmond, Va. Discussed by Drs. Risley, Knapp, Arlt, Lippincott, Holt, Holmes, Churchman, Borsch, Butler and White.

The following resolution was offered by Dr. Casey A. Wood, Chicago, and, on motion, was adopted by the Section:

WHEREAS, The employment as beverages of wood, spirit or methyl alcohol, and its various preparations, is known to have been responsible for numerous deaths and many cases of blindness in this country during the past few years; and

WHEREAS, Even the breathing of confined air charged with the fumes of this form of alcohol has been shown to produce blindness,

Resolved, That the House of Delegates of the American Medical Association, recognizing the dangerous character of wood alcohol and liquors containing it, believes that it should be placed on the list of poisons; it cordially urges the proper federal and state authorities to take the necessary steps to protect life and eyesight from its pernicious influence.

"Tumors of the Orbit," by Dr. H. V. Würdemann, Milwaukee. Discussed by Drs. Bull, Elliott, Fox, Klinedinst, McReynolds, Clark and Würdemann.

"A Case of Pulsating Exophthalmos: Successive Ligation of Both Common Carotids: Death," by Dr. Howard F. Hansell, Philadelphia.

"Intermittent Exophthalmos, with the Report of a Case," by William C. Posey, Philadelphia.

These two papers were discussed by Drs. Holmes, Borsch, Seaman, Wilder, Savage, Pyle, Randolph and Posey.

"Diaphoresis and Diaphoretics in Ophthalmic Therapeutics," by Dr. Hiram Woods, Baltimore, and Dr. T. A. Woodruff, Chicago. Discussed by Drs. Marple, Pyle, Timberman, Reber, Connor, Ayres, Holt, Borsch, Buller, Thompson, Woods and Woodruff.

WEDNESDAY, JUNE 8—MORNING.

"Is Bilateral Operation for Cataract Ever Justifiable, and, if Not, How Soon After Operation on the First Eye is It Safe to Extract the Second Cataract?" by Dr. A. W. Calhoun, Atlanta, Ga. Discussed by Drs. Ray, Thompson, Hansell, Taylor, Callan, Muncaster, Clark, Holt and Calhoun.

"Reclination of the Lens: Under Certain Conditions, a Justifiable Operation," by Dr. F. T. Rogers, Providence, R. I. Discussed by Drs. Fox, Würdemann, Thompson, Parke, Risley and Rogers.

Address, by special invitation, "The Importance of General Therapeutics in the Management of Ocular Affections," by Dr. A. Maitland Ramsay, Glasgow, Scotland.

A rising vote of thanks was tendered Dr. Ramsay by the Section.

On motion of Dr. Bulson a copy of Dr. Ramsay's paper was requested for publication in the transactions of the Section.

"Septic Thrombosis of the Cavernous Sinus, with a Report of Three Cases," by Dr. E. C. Ellett, Memphis, Tenn. Discussed by Drs. Risley, Prefontaine, Miles and Ellett.

Dr. Casey A. Wood was instructed by vote of the Section, on motion of Dr. A. D. Risley, to bring before the House of Delegates the name of Dr. A. Maitland Ramsay as one of the three guests eligible to election as honorary members of the Association.

"The Conservative Treatment of Affections of the Lachrymal Apparatus," by Dr. S. D. Risley, Philadelphia. Discussed by Drs. De Schweinitz, Brode, Connor, Bernstein, Sutphen, Ramsay, Theobald, Holt, Wilder and Risley.

"The Mathematical Point of Reversal in Skiascopy," by Dr. Swan M. Burnett, Washington. Discussed by Drs. Jackson, Stevenson and Burnett.

The Secretary read a communication from Dr. W. W. Keen, chairman of the Reed Memorial Fund Committee, asking that an opportunity be given the Section to contribute. The Chairman appointed Drs. Holt, Washington, and Bulson to act in the matter.

WEDNESDAY, JUNE 8—AFTERNOON.

"Some Injuries of the Eye in Their Medicolegal Aspect," by Dr. John J. Kyle, Indianapolis. Discussed by Drs. Starkey, Thompson, Würdemann, Jackson and John J. Kyle.

"Blindness and Oculomotor Palsies from Injuries Apparently Not Involving the Optic or Oculomotor Nerves," by Dr. Alvin A. Hubbell, Buffalo. Discussed by Drs. Risley, De Schweinitz and Hubbell.

"The Ocular Symptoms of Lesions of the Optic Chiasm," by Dr. G. E. De Schweinitz and Dr. John T. Carpenter, Philadelphia. Discussed by Drs. Wood, Carpenter, Veasey, Borsch, Ashman, Tiffany, Holmes, Weeks and De Schweinitz.

"Contraction of the Visual Field a Symptom of Anesthesia of the Retina," by Dr. L. Webster Fox, Philadelphia. Discussed by Drs. Pyle, Holt, De Schweinitz and Fox.

"Syphiloma of the Ciliary Body," by Dr. Herman Knapp, New York. Discussed by Drs. Burnett, Kipp, Holt, Ledbetter, Randolph and Knapp.

Dr. George E. De Schweinitz, Philadelphia, extended a special invitation to the Section to visit the laboratories of the University of Pennsylvania, in Philadelphia.

"Temporal Cleft of the Nerve Head, and the Other Fundus Anomalies Often Present with It," by Dr. Charles H. Beard, Chicago. Discussed by Drs. De Schweinitz, Brown and Beard.

"Obstruction in the Retinal Arteries," by Dr. Allen Greenwood, Boston. Discussed by Drs. Weeks and Greenwood.

"Development of the Faculty of Binocular Vision," by Dr. Edward Jackson, Denver. Discussed by Drs. Reber, Wood and Jackson.

"The Usefulness of the Ophthalmometer," by Dr. F. C. Heath, Indianapolis. Discussed by Drs. Reber, Ray, Clark, Jackson and Heath.

THURSDAY, JUNE 9—MORNING.

Meeting called to order at 9 a. m.

"Some Problems of Presbyopia," by Dr. George M. Gould, Philadelphia. Discussed by Drs. Randolph, Savage, Knapp, Stevenson, Pyle, Valk, Kirkendall, Thompson and Gould.

"Clinical and Histologic Observations on Sympathetic Ophthalmia," by Dr. Clarence A. Veasey, Philadelphia.

"Sympathetic Ophthalmitis," by Dr. Samuel Theobald, Baltimore.

"Operative Procedures on the Exciting Eye and the Sympathetic Eye in Cases of Sympathetic Ophthalmia," by Dr. John E. Weeks, New York.

These four papers were discussed by Drs. Clark, Connor, Williams (Boston), Wilson (Bridgeport), Savage, Jackson, Sutphen, Thompson, Ayers, Randolph, Veasey, Theobald and Weeks.

"Methyl Alcohol Intoxication," by Dr. Frank Buller, Montreal, Canada, by special invitation.

Dr. Casey A. Wood, Chicago, presented a supplemental report on the subject of "Methyl Alcohol Intoxication."

A vote of thanks was given to Drs. Buller and Wood for their presentation of the subject.

"New Views Regarding the Horopter," by Dr. George T. Stevens, New York. Discussed by Drs. Savage and Stevens.

THURSDAY, JUNE 9—AFTERNOON.

Report of the Nominating Committee: Chairman, Dr. C. R. Holmes, Cincinnati; secretary, Dr. Walter L. Pyle, Philadelphia; delegate, Dr. Melville Black, Denver; alternate, Dr. Hiram Woods, Baltimore. These were elected.

"Brief Report of Two Additional Cases of Sympathectomy for Glaucoma," by Dr. W. R. Marple, New York. Discussed by Drs. Wilder, Weeks and Marple.

"The Environment and Visual Requirements of Railway Engineers and Firemen; Personal Observations from an Engine Cab," by Dr. Nelson M. Black, Milwaukee. Discussed by Drs. Williams, Weeks, Claiborne, Lambert, Kirkendall, Würdemann, Todd, Clark, Randolph and Black.

"(a) Some New Types for the Reading Distance. (b) An Improved Form of Apparatus for Testing the Position of the Axes of the Eyes," by Dr. Charles H. Williams, Boston.

"The Association of Optic Neuritis and Facial Paralysis," by Dr. Edward Shumway, Philadelphia. Discussed by Drs. Weeks and Shumway.

"Blastomycosis of the Eyelid," by Dr. William H. Wilder, Chicago. Discussed by Drs. Pusey, Ellett and Wilder.

"The Axis of Astigmatism," by Dr. J. H. Claiborne, New York.

"The Relation of Corneal Curvatures to the Refraction of the Eyes," by Dr. Melville Black, Denver.

These two papers were discussed by Drs. Griffin, Bennett, Harlan, Borsch, Claiborne and Black.

"An Exact and Secure Tucking Operation for Advancing an Ocular Muscle. Illustrated by Demonstration on a Manikin," by Dr. F. C. Todd, Minneapolis. Discussed by Drs. Savage, Reber, Wilkinson, Stevenson, Weeks, Lambert, Fox, Borsch and Todd.

"Subjective Refraction," by Dr. John A. Tenney, Boston. Discussed by Drs. Savage and Black.

"Double Radial Rupture of the Iris, Causing a Complete and Well-Formed Iridectomy," by Dr. S. C. Ayers, Cincinnati. Discussed by Drs. Reber, Borsch, Loughery and Harlan.

Dr. Albert E. Bulson, Jr., Fort Wayne, presented a report from Dr. Frank Allport, Chicago, on what had been done in pursuance of the resolution passed at the New Orleans Session last year as to measures to be taken by boards of health, boards of education and school authorities, and the possibilities of securing legislation looking to the examination of the eyes and ears of school children. The report was adopted.

The Section tendered a vote of thanks to the local committee; to Earl J. Brown, and the Geneva Optical Company for the use of their projecting apparatus, and to W. T. Keener, and to the Chicago Eye, Ear, Nose and Throat College for loan of the Hoy Opaque Projector. The Section also tendered a vote of thanks to the officers for the excellence of their work.

The Secretary announced that the registration of the Section was 75 more than at any previous meeting.

Section on Diseases of Children.

TUESDAY, JUNE 7.

Dr. Charles G. Kerley, New York City, Chairman, said in opening the meeting: It is my privilege and pleasure to welcome you to the Section on Diseases of Children of the American Medical Association. The Secretary and Chairman have endeavored to prepare a program with which you will be pleased, and in order to make the session of interest, we would be much gratified if there would be a prompt and free discussion. We have, if you will notice, men on the program who are eminent in the various lines of work in which they are engaged—men of national and international reputation. I trust that by a prompt discussion, and a prompt and regular attendance, the members of the Section will show their interest and appreciation.

The Chairman then gave his address: "The Demands of the Child by Virtue of Right."

"Erythema Nodosum in Children," by Isaac A. Abt, Chicago. Discussed by David Lieberthal, Chicago.

"Whooping Cough; a Study of Eighteen Cases Treated with the Elastic Abdominal Belt," by Theron W. Kilmer, New York City. Discussed by Charles G. Kerley, New York; Louis Fischer, New York; R. B. Gilbert, Louisville; J. F. Bigony, West Virginia; John L. Morse, Boston; L. C. Ager, Brooklyn N. Y.; F. Bernheim, Butte, Mont., and T. W. Kilmer.

"Some Clinical Observations on Malnutrition and Its Relationship to Infantile Tuberculosis," by Louis Fischer, New York City. Discussed by A. Jacobi, New York; W. B. Ulrich, Chester, Pa.; Charles C. Browning, Highland, Cal.; A. Jacobi, New York; C. F. Wahrer, Ft. Madison, Ia.; Paulus A. Irving, Richmond, Va., and L. Fischer.

WEDNESDAY, JUNE 8—MORNING.

The Section was called to order at 9:30 a. m.

On motion of Henry E. Tuley, Louisville, Ky., a set of by-laws for the Section was adopted.

DR. TULEY: I would suggest that they be printed, so that the new secretary of the Section may mail a copy to each member.

"How to Produce the Best Milk for Artificial Infant Feeding," by Edward F. Brush, Mt. Vernon, N. Y.

"The Initial Contamination of Dairy Milk," by Richard Cole Newton, Montclair, N. J.

These two papers were discussed by J. P. Crozier Griffith, Philadelphia; F. L. Smith, Bridgeport, Conn.; L. C. Ager, Brooklyn, N. Y.; W. B. Ulrich, Chester, Pa.; Thomas S. Southworth, New York; W. D. Schwartz, Portland, Ind.; John L. Morse, Boston; Louis Fischer, New York; S. McC. Hamill, Philadelphia; J. H. Claiborne, New York; R. B. Gilbert, Louisville, Ky.; C. F. Wahrer, Fort Madison, Ia.; Edward F. Brush, Mt. Vernon, N. Y., and R. C. Newton, Montclair, N. J.

"Chronic Constipation in the Infant," by J. Ross Snyder, Birmingham, Ala. Discussed by Thomas S. Southworth, New York; Isaac A. Abt, Chicago, and J. Ross Snyder.

"The Effect on the Nervous System of Children of Uncorrected Refractive Errors and Muscular Imbalance," by J. H. Claiborne, New York City.

"Congenital Occlusion of the Lachrymal Canal, and Acute Contagious Inflammations of the Conjunctiva in Children," by John E. Weeks, New York City.

These two papers were discussed by Arthur G. Bennett, Buffalo, N. Y.; Isaac A. Abt, Chicago; Samuel Walker, Chicago; Herman Jarecky, New York; Charles G. Kerley, New York; —— Ashley, Colorado, and J. H. Claiborne, New York.

The Chairman announced that Dr. William H. Bennett invited the members of the Section to visit the Children's Seaside Sanatorium at any time during the meeting; he also made other announcements.

WEDNESDAY, JUNE 8—AFTERNOON.

"Enuresis," by Maurice Ostheimer and I. Valentine Levi, Philadelphia. Discussed by Edwin E. Graham, Philadelphia; Isaac A. Abt, Chicago, and Dr. Ostheimer.

"The Bacteriology of Summer Diarrhea," by William H. Park, New York City.

"A Summer's Experience with Infantile Dysentery," by J. H. Mason Knox, Jr., Baltimore.

"The Bacillus Dysenteriæ in Relation to the Diarrheal Diseases of Infants: A Clinical Study of 287 Cases," by L. Emmett Holt, New York City.

"Some Findings in Summer Diarrheas of Children," by John C. Cook, Chicago.

"The Management of Summer Diarrhea," by Thomas S. Southworth, New York City.

This symposium was discussed by J. P. Crozier Griffith, Philadelphia; John L. Morse, Boston, Mass.; D. E. English, Mill Burn, N. J.; Theron W. Kilmer, New York; R. B. Gilbert, Louisville, Ky.; Rosa Engelmann, Chicago; William T. Watson, Baltimore; —— Stowell, New York; Park, Knox and Southworth.

"Landry's Paralysis in Children, with Report of a Case," by Henry Enos Tuley, Louisville, Ky. Discussed by C. F. Wahrer, Fort Madison, Ia.

THURSDAY, JUNE 9—MORNING.

The Section was called to order at 9 a. m.

"Hematuria as the Earliest or Only Symptom of Infantile Scurvy," by John Lovett Morse, Boston. Discussed by L. C. Ager, Brooklyn, N. Y.; William L. Stowell, New York; H. M. McClanahan, Omaha, Neb.; J. Ross Snyder, Birmingham, Ala., and Morse.

"Intestinal Obstruction in Children," by John F. Erdman, New York City. Discussed by A. Jacobi, New York; Isaac A. Abt, Chicago; Louis Fischer, New York; S. W. Kelley, Cleveland, O.; Samuel McC. Hamill, Philadelphia; A. Jacobi, New York; John L. Morse, Boston, Mass., and John F. Erdman.

The Chairman announced that, if the proceedings of the Section were to be printed in the form of a book, it would be necessary to have 75 subscriptions at $1 each in advance. The matter of collecting for the books, etc., is in the hands of the officers of the Section.

"Perinephritis in Children," by Wisner R. Townsend, New York City. Discussed by R. B. Gilbert, Louisville, Ky.; A. Jacobi, New York, and W. R. Townsend.

"Diagnosis of Enlarged Bronchial Lymph Nodes in Children," by Albert Friedlander, Cincinnati, O. Discussed by R. B. Gilbert, Louisville, Ky.; G. N. Jack, Buffalo, N. Y.; E. D. Fenner, New Orleans, La.; Theron W. Kilmer, New York; Louis J. Lautenbach, Philadelphia, and A. Friedlander.

"The Importance of an Early Aural Examination in Acute Inflammatory Diseases in Children," by James F. McKernon, New York City. Discussed by Herman Jarecky, New York; Samuel Walker, Chicago; Samuel McC. Hamill, Philadelphia; Theron W. Kilmer, New York; Louis Fischer, New York; S. W. Tenna, Nyack, N. Y.; Thomas S. Southworth, New York; F. L. Smith, Bridgeport, Conn.; Charles G. Kerley, New York; J. F. McKernon and Herman Jarecky.

THURSDAY, JUNE 9—AFTERNOON.

The Section was called to order at 2:30 p. m.

The Chairman said: "Before proceeding to the election of officers of the ensuing year, I wish to take this opportunity to thank those who have contributed papers to this section, and also those who have been prompt in their attendance and aided us in the discussion. I also wish to express my thanks to the Secretary, Dr. Wahrer, for his very efficient work. The greater part of the work in connection with our program was done by him, and no section of the American Medical Association has had a more industrious and indefatigable secretary than the Section on Diseases of Children."

The Secretary said: "I wish to thank those with whom I have been in correspondence during the past year for the uniform courtesy extended to me. The correspondence entailed considerable labor, but it has proved one of the most agreeable tasks that I ever undertook since I have been a member of the medical profession. I thank you again for your kindness."

The Nominating Committee's report was adopted as follows: Chairman, John Lovett Morse, Boston; vice-chairman, William E. Darnall, Atlantic City, N. J.; secretary, J. Ross Snyder, Birmingham, Ala.; delegate, W. C. Hollopeter, Philadelphia.

Dr. Morse, the new Chairman, said: "Never having been placed in a situation like this before, I hardly know what to say or do. I can only thank you for the honor you have conferred on me. I shall certainly try to keep up the high standard of work done in this Section during the past few years, and you who have been present at these sessions will appreciate what a task I have before me. It depends on you, as well as on me, to make the next year's session a success."

"Some Physical Signs in Infants and Children Not Sufficiently Emphasized," by Samuel McClintock Hamill and Dr. Theo. Le Boutillier, Philadelphia. Discussed by John L. Morse, Boston, Mass.; L. C. Ager, Brooklyn, N. Y., and R. B. Gilbert, Louisville, Ky.

"The Management of Hernia in Infancy and Childhood, with Results of Operative Treatment," by William B. H. Coley, New York City. Discussed by D. E. English, Mill Burn, N. J.; Arthur L. Fisk, New York City; Rosa Engelmann, Chicago, and William H. Coley.

"Chorea," by W. C. Hollopeter, Philadelphia. Discussed by E. D. Fenner, New Orleans, La.; C. F. Wahrer, Fort Madison, Ia., and W. C. Hollopeter.

"Diseases of Children Occasioned by Affections of the Nose; The Necessity for Recognition and Treatment." Dr. Louis J. Lautenbach, Philadelphia.

"A Study of a Case Conjoining Myxedema and Diabetes Mellitus," by August Adrian Strasser, Arlington, N. J.

Section on Stomatology.

TUESDAY, JUNE 7.

The Section was called to order at 2:45 by the Chairman, Dr. G. V. Eames, Boston.

The report of the Secretary was read.

A symposium on Dental Education was read, consisting of the following papers:

"Phases of Dental Education," by Dr. A. E. Baldwin, Chicago.

"The Evolution of Standards in Dental Education," by Dr. Charles Chittenden, Madison, Wis.

"Dental Education: a Retrogressive and Prospective View," by Dr. John S. Marshall, San Francisco.

Address of the Chairman: "The Value of Symmetry in the Development of Professional Character and Education," by Dr. G. V. Eames, Boston. These four papers were discussed by Drs. Briggs, Williams, Truman, Hoff, Steeves, Bogue, Rhein, Brown, Lederer, Kirk, Talbot, Baldwin and Eames.

The following resolution was offered by Dr. M. L. Rhein of New York and adopted:

Resolved, That the Section on Stomatology of the American Medical Association, in session at Atlantic City, sends its greetings to the National Association of Dental Faculties. We congratulate the Association on the completion of the first year of the advanced four years' course. We sincerely trust that, having the honor and standing of the profession in your hands, no action will be taken that will tend to lower the advanced stand that has been taken.

Drs. Steeves and Bogue were appointed on the Executive Committee, to take the places of Drs. Peck and Andrews.

WEDNESDAY, JUNE 8—MORNING.

The meeting was called to order at 9 a. m.

The first paper read was "Multiple Fracture of the Lower Jaw, Complicated by Simultaneous Fracture of the Upper Jaw," by Dr. Thomas L. Gilmer, Chicago. Discussed by Dr. Brown.

"Ankylosis of the Jaw," by Dr. G. Lenox Curtis, New York. Discussed by Drs. Brown, Briggs and Allan.

"Prophylaxis: Its Various Phases, in Relation to the Conservation of the Teeth," by Dr. Charles F. Allan, Newburgh, N. Y.

"Changes in the Salivary Secretions as Affected by Systemic Disease," by Drs. Heinrich Stern and William Lederer, New York, was read by Dr. Lederer.

These two papers were discussed by Drs. Talbot, Bogue, Cryer, Brown, Rhein, Latham, Allan and Lederer.

Dr. G. V. I. Brown, Milwaukee, read a paper on "A System for Surgical Treatment of Harelip, Cleft Palate and Facial Deformities, and Post-Operative Speech Education."

The Nominating Committee was appointed as follows: Dr. G. V. I. Brown, of Milwaukee; Dr. Alice M. Steeves, of Boston, and Dr. M. L. Rhein, of New York.

WEDNESDAY, JUNE 8—AFTERNOON.

The session was called to order at 2:30.

"Report of a Case of Vincent's Angina and Stomatitis, with

"Photographs," by Dr. George C. Crandall, St. Louis. Discussed by Drs. Latham and Briggs.

A symposium on the Dental Pulp was read, consisting of the following papers:

"Vital Principles in Adult Pulp," by Dr. E. B. Andrews, Cambridge.

"Neoplasm or Epithelioma of the Tooth Pulp," by Dr. Vida A. Latham, Rogers Park, Ill.

"Degeneration of the Tooth Pulp," by Dr. Eugene S. Talbot, Chicago.

These three papers were discussed by Drs. Rhein, Bogue, Williams, Briggs, A. H. Harlan, Latham and Talbot.

THURSDAY, JUNE 9.

The meeting was called to order by the Chairman, Dr. George F. Eames, Boston, at 9:15.

"Treatment of Pathologic Irregularities of the Teeth," by Dr. M. H. Fletcher, Cincinnati. Discussed by Dr. Talbot.

"Retarded Eruption of the Teeth," by Dr. Matthew H. Cryer, Philadelphia. Discussed by Drs. Bogue, Rhein, Kasanjian, Steeves, Stalwagen, Talbot and Cryer.

Dr. M. L. Rhein, New York City, read a paper entitled "Oral Infection and Sterilization." Discussed by Drs. Bogue, McCurdy, Harlan, Talbot, Steeves, Eames, Latham and Rhein.

Dr. Stewart L. McCurdy, Pittsburg, Pa., read a paper on "Necrosis of the Bones of the Face." Discussed by Drs. Talbot, Rhein and McCurdy.

The following officers were elected: Chairman, Dr. Vida A. Latham, Rogers Park, Chicago; Vice-Chairman, Dr. E. C. Briggs, Boston; Secretary, Dr. Eugene S. Talbot, Chicago; Delegate, Dr. A. E. Baldwin, Chicago.

Section on Nervous and Mental Diseases.

TUESDAY, JUNE 7.

The meeting was called to order at 2 p. m. by the Secretary, Dr. David I. Wolfstein, Cincinnati.

On motion of Dr. Herdman, Ann Arbor, Mich., Dr. Howell T. Pershing, Denver, was chosen Temporary Chairman, to fill the vacancy caused by the death of the Chairman, Dr. F. Savary Pearce.

On motion, the Chairman appointed the following committee to draw up suitable resolutions on the death of the Chairman: Dr. Charles K. Mills, Philadelphia; Dr. Richard Dewey, Wauwatosa, Wis., and Dr. W. J. Herdman, Ann Arbor, Mich., and requested that the committee report at the meeting of the society the next morning.

On motion, a similar committee was appointed to take action on the death of Dr. Orpheus Everts, Cincinnati, composed of Dr. F. W. Langdon, Cincinnati; Dr. Brainard, and Dr. Hugh T. Patrick, Chicago.

Dr. David I. Wolfstein of Cincinnati was appointed teller of the election of the Nominating Committee, composed of the following: Dr. Charles K. Mills Philadelphia; Dr. F. W. Langdon, Cincinnati, and Dr. C. B. Burr, Flint, Mich.

The Chairman announced that the minutes of the last meeting were in the hands of the former Secretary, Dr. Pearce, prior to his death, and that as the present Secretary had not been able to obtain them, their reading would be dispensed with.

The Chairman also announced that there would be no Section dinner this year.

"Report of the Committee on the Collection of Information Regarding Public School Methods and Their Effects on Mental and Physical Health of School Children," by Dr. W. J. Herdman, Ann Arbor. On motion of Dr. C. B. Burr the report was accepted and the committee continued.

A symposium on Choreiform and Other Spasmodic Movements was read, with the following papers:

"Symptomatology, Pathology and Treatment of Choreiform Movements," by Dr. William G. Spiller, Philadelphia.

"Convulsive Tic," by Dr. Hugh T. Patrick, Chicago.

"Hysterical Movements," by Dr. Howell T. Pershing, Denver.

These three papers were discussed by Drs. Mills, Onuf, Coulter, Hamilton, McGregor, Crowell, McCarthy, Punton, Rhein, Wharton, Sinkler, Hargus, Sterne, Williams, Jones, Spiller, Patrick and Pershing.

A motion by Dr. Albert E. Sterne, Indianapolis, that no Wednesday morning session be held, and that the meetings be continued on Friday morning, in order that the members might have an opportunity to attend the symposium on arteriosclerosis in the Section on Practice of Medicine on Wednesday morning, was discussed by Drs. C. H. Williams, Beebe and others and, on vote, was lost.

WEDNESDAY, JUNE 8—MORNING.

The Section was called to order by the temporary Chairman, at 9:30 a. m.

"The Nature of Traumatic Sclerosis," by Dr. Arthur Conklin Brush, Brooklyn, N. Y. Discussed by Dr. Angell.

"The Dividing Line Between Neuroses and Psychoses, and the Position of Neurasthenia," by Dr. Richard Dewey, Wauwatosa, Wis.

"The Present Campaign Against Insanity," by Dr. W. J. Herdman, Ann Arbor, Mich. Discussed by Dr. Searcy.

"Dementia Precox," by Dr. F. X. Dercum, Philadelphia. Discussed by Drs. Langdon and Dercum.

"The Treatment of Aphasia by Training, with Some Remarks on the Re-education of the Adult Brain," by Dr. Charles K. Mills, Philadelphia. Dr. Mills exhibited two patients.

"Epitome of Methods Employed in the Treatment of Aphasia," by T. H. Weisenburg, Philadelphia. Discussed by Drs. Weisenburg, Burr, Spiller, Diefendorf, Punton, Langdon, Herdman, Hersmann and Mills.

"Tuberculosis of the Nervous System," by Dr. D. J. McCarthy, Philadelphia. Discussed by Drs. Mills, Dercum, Spiller, Wolfstein and McCarthy.

WEDNESDAY, JUNE 8—AFTERNOON.

The Section was called to order at 2:15 by Dr. Pershing.

The report of the Nominating Committee was adopted: Chairman, Dr. James H. McBride, Pasadena, Cal.; Secretary, Dr. David I. Wolfstein, Cincinnati; Executive Committeeman, Dr. Howell T. Pershing, Denver.

The committee appointed to prepare resolutions of regret on the death of Dr. Everts submitted the following:

Dr. Orpheus Everts of Cincinnati, a member of the American Medical Association for many years, and a frequent and active collaborator in the work of the Section on Nervous and Mental Diseases, departed this life on June 19, 1903, at his home in College Hill, Cincinnati, in his seventy-seventh year.

Dr. Everts had a national reputation as an alienist, and was known to us personally as a dignified and companionable gentleman, and a comprehensive observer and a philosophical thinker, whose efforts contributed materially to the high character of the work of this Section: therefore, be it

1. *Resolved*, That by the death of Dr. Everts, the American Medical Association has lost a valued member in its councils, this Section an active and progressive contributor to its proceedings, and the country a physician of broad attainments and power.

2. *Resolved*, That these resolutions be spread on the minutes of the Section and published in THE JOURNAL, and that a copy of the same be transmitted to the family of our departed collaborator.

"Facial Paralysis, Bilateral, with Marked Sensory and Reflex Defects, Possibly Due to La Grippe," by Dr. F. W. Langdon, Cincinnati. Discussed by Drs. Weisenburg, Patrick, Coulter, Sterne and Langdon.

"A Clinicopathologic Study of Hemiplegia, with a Microscopic Examination in Eleven Cases," by Dr. T. H. Weisenburg, Philadelphia. Discussed by Drs. Hinsdale, Patrick, Diller, Wolfstein, Coulter, Norbury, Brush, Brainard, Sterne and Weisenburg.

"Two Cases of Congenital Deformity Possibly Due to Intrauterine Disease of the Spinal Cord," by Dr. Charles W. Burr, Philadelphia. Discussed by Drs. Dercum, Coulter, Onuf, Sterne, Shelly, Hersmann and Burr.

The committee appointed to prepare resolutions on the death of Dr. F. Savary Pearce reported as follows:

Your committee would respectfully recommend that the following minute be placed by the Secretary in the records of this Section, and that a copy of the same be sent to the family of Dr. F. Savary Pearce, to the faculty of the Medico-Chirurgical College of Philadelphia, to THE JOURNAL of the American Medical Association and to other selected journals:

The Section on Nervous and Mental Diseases of the American Medical Association desires to give fitting expression to its sense of sorrow and loss in the sudden and unexpected death of its Chairman-elect for this session, Dr. F. Savary Pearce. For many years Dr. Pearce was a regular attendant on the meetings of this Section, and a frequent and valued contributor to its proceedings. During three years he served with great efficiency as Secretary of the Section, and by his wise and untiring efforts greatly expanded its influence.

Graduating from the Medical Department of the University of Pennsylvania, Dr. Pearce in the earlier years of his professional career, filled with great credit to himself a number of important hospital positions. He early devoted himself to neurology as a special study, and made from time to time many valuable contributions to the literature of that branch of medicine. He was elected professor of nervous diseases in the Medico-Chirurgical College of Philadelphia, and about the same time became one of the neurologists of the Philadelphia Hospital, in both of which positions his work, as that of his entire professional life, was characterized by enthusiasm, zeal and ability. A few months before his death he published a text-book on nervous diseases, and was engaged in preparing one of like scope on insanity.

Dr. Pearce was personally a man of genial and kindly spirit, ardent and faithful in his friendships, greatly beloved by those whose duties brought them into close contact with him. In the death of Dr. Pearce the American Medical Association, and especially this Section, has sustained a serious loss, and while yielding obedience to Divine command, we would extend to the relatives and friends of our esteemed associate our appreciation of his worth, and our profound sympathy with them in their sorrow.

"A Case of Spastic Diplegia Occurring During an Attack of Pertussis, with Autopsy," by Dr. J. H. W. Rhein, Philadelphia. Discussed by Drs. Weisenburg, Moore and Rhein.

"An Encouraging Case of Locomotor Ataxia," by Dr. Guy Hinsdale, Hot Springs, Va.

"The Treatment of Acute Anterior Poliomyelitis by Nerve Anastomosis," by Drs. W. G. Spiller and Charles Frazier, Philadelphia. Read by Dr. Spiller. Discussed by Drs. Sinkler, Sterne, Wolfstein, Hersman, Weisenburg, Pershing, Sterne and Spiller.

"Some Unusual Forms of Multiple Neuritis," by Dr. Wharton Sinkler, Philadelphia. Discussed by Drs. Rhein, Angell, Wolfstein, Weisenburg, Hersman, Moore and Sinkler.

THURSDAY, JUNE 9—MORNING.

The meeting was called to order at 9:30 a. m. by Dr. Pershing.

"A Dynamometer for Measuring Perspiration," by Dr. H. A. Wetherill, Philadelphia.

"Localized Convulsive Seizures, with Report of Case," by Dr. S. Bell, Detroit.

"Minor or Border-line Psychoses of Alcoholism," by Dr. Frank P. Norbury, Jacksonville, Ill.

"Psychic Force," by Dr. Brooks F. Beebe, Cincinnati.

These three papers were discussed by Drs. Brush, Pershing, Herdman, McBride, Sterne, Langdon, Dewey, Angell, Pershing, Searcy, Wolfstein, Diller and Beebe.

"Have Drug Habits a Pathologic Basis?" by Dr. Albert E. Sterne, Indianapolis. Discussed by Drs. Pressey, Dewey, Crowell and Sterne.

On motion of Dr. Smith Ely Jelliffe, New York, the Chairman was instructed to appoint a committee to investigate the pathologic effects of the drug habits.

"A Case of Locomotor Ataxia, with a Tremor Resembling Paralysis Agitans," by Dr. John H. W. Rhein, Philadelphia.

"Should Inebriates be Punished by Death for Crime?" by Dr. T. D. Crothers, Hartford, Conn. Discussed by Drs. Beebe, Crowell, Sterne and Crothers.

THURSDAY, JUNE 9—AFTERNOON.

The meeting was called to order at 2:25 p. m. by the temporary Chairman, Dr. Pershing.

"Some Interesting Autopsy Findings in Epilepsy," by Dr. B. Onuf, Sonyea, N. Y. Discussed by Drs. Wolfstein, Spiller and Onuf.

"A Large Tumor of the Frontal Lobe," by Drs. Philip King

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Brown, San Francisco, and W. W. Keen, Philadelphia. Read by Dr. Keen.

"A Brain Tumor with Progressive Blindness as Its Most Prominent Feature, with Microscopic Report," by Drs. W. C. Kendig and D. I. Wolfstein.

These two papers were discussed by Drs. Diller, Mills, Sterne, Langdon, Dercum, Spiller, Oneal, Mills, Wolfstein and Keen.

Dr. F. W. Langdon was elected a member of the House of Delegates for the ensuing year.

"Hysterical Delirium; Report of Four Cases," by Dr. Theodore Diller, Pittsburg, Pa. Discussed by Drs. Pershing, Dercum and Diller.

"The Relation of States of Apprehension to Cardiac Disease," by Dr. William Rush Dunton, Jr., Baltimore.

In accordance with the resolution passed at the morning session, the Chairman appointed the following committee to investigate the pathologic effects of the drug habits: Dr. Smith Ely Jelliffe, New York; Dr. Brooks F. Beebe, Cincinnati, and Dr. Albert E. Sterne, Indianapolis.

Section on Cutaneous Medicine and Surgery.

Tuesday, June 7.

The Section was called to order by the Chairman at 2 p. m.

Dr. Henry G. Anthony, Chicago, then read the Chairman's Address, "The Developmental Defects of the Skin and Their Malignant Growths." Discussed by Drs. Fordyce, Ravogli, Corlett, Heidingsfeld, Montgomery and Anthony.

"Falling of the Hair," by Dr. R. A. McDonnell, Connecticut. Discussed by Drs. Ludwig Weiss, Kessler, Cox, Ravogli and McDonnell.

Dr. John A. Fordyce, New York, read a paper entitled "Report of a Case of Paget's Disease of the Gluteal Region." Discussed by Drs. Stelwagon and Pusey.

"Radium and Its Therapeutic Possibilities," by Dr. William Allen Pusey, Chicago. Discussed by Drs. Schamberg, Bulkley, Heidingsfeld and Pusey.

"Linear Nevi," by Dr. M. L. Heidingsfeld. Discussed by Drs. Pusey and Heidingsfeld.

Dr. John V. Shoemaker, Pennsylvania, exhibited a "Remarkable Case of Xanthoma," which was discussed by Drs. Brayton, Pusey, Lieberthal, Cox, Schamberg, Montgomery, Heidingsfeld, Bulkley, Anthony and Shoemaker.

Under "New Business," Dr. W. L. Baum, Chicago, stated that the American Dermatological Association had appointed Dr. Stelwagon to use his best efforts toward securing the meeting of the International Dermatological Congress, three years hence, for New York City, and made a motion that this Section give similar instructions to Dr. Stelwagon. Motion carried.

The program having been completed the Section adjourned.

Wednesday, June 8.

The Section was called to order by the Chairman at 2 p. m.

The Chairman announced as a Nominating Committee Drs. Baum, Kessler and Corlett.

"A False or Cicatricial Keloid," by Dr. A. Ravogli. Discussed by Drs. Gottheil, Baum, New York; Wallis, Moses, Heidingsfeld and Ravogli.

The Chairman introduced Dr. Charles B. Cooper, Honolulu, Hawaii, who said: I do not make any pretense at being a dermatologist; I am a general practitioner. In the territory of Hawaii we have had charge of the leper stations. Leprosy was first discovered among the islanders in 1848, and it spread to such an alarming extent that in 1864 or 1865 the legislature decided that all persons having the disease must be segregated. A place on the island of Molokai was picked out, comprising an area of 7,000 acres, hemmed in by high mountains from 2,000 to 4,000 feet high, and which can only be approached by a very narrow pass, which is constantly guarded. Since 1864 there has been sent to the settlement about 5,000 cases of different nationalities, over 85 per cent. being Hawaiians and not over 30 per cent. Caucasians. It is a great burden on the taxpayers to keep up the settlement, and especially so since the annexation to the United States by which the income of the territory is depleted of $120,000 a month, which goes to the federal treasury. We are very anxious that something more should be done than we are able to do for the scientific investigation of this disease, and it was with that idea that I made this trip. I attended the meeting of the state and territorial officers in Washington a few days ago and have come here in hopes that this Section would be interested to take up the matter. I feel sure that something will be done for the scientific research work in finding a cure for the disease. I have a collection of photographs of different types of the disease, also views of the settlement, showing their homes and how they live, with their surroundings.

In reply to a question Dr. Cooper said further: There is no doubt about leprosy being very mildly contagious, and it is less so among Caucasians, who live in proper hygienic surroundings, than among the natives, who eat with their fingers out of the same bowl, rub their noses together when they kiss and become inoculated through the mucous membrane. Only about 40 Americans have taken the disease since 1864; at the same time I do not think any chances should be taken. The only safety lies in absolute segregation. The Hawaiian Islands are known to have been inhabited for hundreds of years. A hundred years ago there were probably 400,000 inhabitants; to-day there are 35,000. There is no record of leprosy among them previous to 1848, and their diet has been the same from time immemorial. Leprosy is supposed to have been brought to the islands by Chinese coolies about 1840, or it might be by ships from the South Sea Islands, where leprosy existed. But the general belief is that it was brought in by the Chinese, and to-day it is called by the natives "Chinese sickness."

Dr. Cooper's report was discussed by Drs. Montgomery, Schamberg, Corlett and Cooper.

"Psorospermosis Cutanea Vegetans Follicularis; Darier's Dermatosis; Keratosis Follicularis (White)," by Dr. David Lieberthal, Chicago. Discussed by A. Ravogli, Bulkley and Lieberthal.

Dr. Henry Stelwagon, Philadelphia, read a paper entitled "A Second Case of Larva Migrans." Discussed by Drs. Schamberg, Lord and Hamburger.

"Acne Keratosa," by Dr. W. S. Gottheil.

"Cover-Glass Cultures, and Their Possibilities in Studying the Epidermic Fungi," by Dr. J. Frank Wallis. These two papers were discussed by Drs. Schamberg, Gottheil, Bulkley and Wallis.

"Prurigo (Hebra), as Observed in the United States," by Dr. W. T. Corlett. Discussed by Drs. Ravogli, Stelwagon, Weiss, Bulkley and Corlett.

Dr. William L. Baum, Chicago, read a paper on "Iodin Absorption and Elimination." On motion of Dr. Heidingsfeld, discussion on this paper was deferred until Thursday.

Dr. Jay F. Schamberg read a paper on "The Diagnosis of Scarlet Fever and Scarlatinoid Affections," which was illustrated by lantern slides. Discussed by Dr. Corlett.

The Chairman called the attention of the members to the desirability of subscribing to the printed transactions of the Section.

Dr. Jay F. Schamberg moved that the American Medical Association urge on the federal authorities an appropriation for the scientific investigation of leprosy in the Hawaiian Islands, looking toward the cure of the disease. Motion carried.

On motion, a vote of thanks was extended to the proprietors of the Shelburne Hotel for courtesies shown the Section.

Thursday, June 9.

The Section was called to order by the Chairman at 9:30 a. m.

Report of the Nominating Committee: Chairman, Dr. D. W. Montgomery, San Francisco; Secretary, Dr. R. R. Campbell, Chicago; Delegate, Dr. A. W. Brayton, Indianapolis.

On motion, the Secretary was instructed to cast the unanimous ballot of the Section for these gentlemen.

On motion of Dr. Baum, Illinois, the Chairman appointed as a committee to gather statistics and information regarding skin diseases, and the general work of the Section, Drs. Baum, New York; Schamberg, Sweeney, Marvel, Shelmire, Lieberthal, Heidingsfeld and Bennett, with instructions to report at the next annual session of the Section.

The discussion of Dr. W. L. Baum's paper was by Drs. Corlett, Currier, Cone and Baum.

"The Treatment of Lupus Erythematosus by Repeated Refrigeration with Ethyl Chlorid," by Dr. M. B. Hartzell, Philadelphia. Discussed by Drs. Heidingsfeld, Allen, Lieberthal, Kessler, Drs. Moses, Ravogli, Baum, New York; Gottheil, Wallis and Hartzell.

"An Instance Where Cutaneous Acrodermatitis was Controlled by the X-Ray," by Dr. D. W. Montgomery, San Francisco. Discussed by Drs. Baum, New York; Pusey, Allen, Ravogli and Montgomery.

"A Case of Dermatitis Herpetiformis Treated with the X-Ray," by Dr. William Thomas Corlett, Cleveland. Discussed by Dr. Currier.

"Comparison of Phototherapy, Radiotherapy and High-Frequency Therapy in Skin Diseases," by Dr. C. W. Allen, New York City. Discussed by Drs. Corlett, Gottheil, Hartzell, Price, Schamberg, Skinner, New York; Currier, Varney, Bulkley, Kessler and Allen.

"X-Ray Therapy in Skin Diseases," by Dr. G. E. Pfahler, Philadelphia. Discussed by Drs. Hartzell, Price, Brayton, Allen and Bulkley.

"The Consideration of Late Hereditary Syphilis," by Dr. R. R. Campbell, Chicago. Discussed by Drs. Brayton, Bulkley, Allen, Moses, Baum, New York, and Campbell.

Dr. W. T. Corlett, Ohio, suggested that the newly-elected Chairman and Secretary appoint a committee to investigate and report at the next annual session on the use of iodin.

On motion of Dr. Schamberg the Chairman and Secretary were instructed to request the House of Delegates to appoint a delegate from the Section on Cutaneous Medicine and Surgery to the International Dermatological Congress at its next meeting, in Berlin, during the summer.

The newly-elected Chairman, Dr. D. W. Montgomery, San Francisco, was then conducted to the chair, and made a few remarks in appreciation of the honor conferred on him.

Section on Laryngology and Otology.

Tuesday, June 7.

Chairman's address, "The Present Status of Otology and Some Suggestions for Its Betterment," Dr. John F. Barnhill, Indianapolis.

"Reflex Apnea and Cardiac Inhibition in Operations on the Respiratory Tract." William Harmar Good and W. G. B. Harland, Philadelphia. (Read by Dr. Harland). Discussion by G. Hudson Makuen, Philadelphia; George L. Richards, Fall River, Mass.; J. Solis Cohen, Philadelphia; Emil Mayer, New York; Edwin Pynchon, Chicago; Robert C. Myles, New York; C. F. Cobb, Boston; Burt Russell Shurly, Detroit, and W. H. Good.

"The Relation of the Chemistry of the Saliva (Sialosemeiology) and Nasal Secretions to Diseases of the Mucous Membrane of the Mouth and Upper Respiratory Tract, with Special Reference to Hay Fever." D. Braden Kyle, Philadelphia. Discussion by E. C. Kirk, Philadelphia; Judson Daland, Philadelphia; E. Fletcher Ingals, Chicago; William H. Fitzgerald, Hartford, Conn.; S. Willis Anderson, Detroit; J. Holinger, Chicago; O. V. Woolen, Indianapolis, and D. Braden Kyle, Philadelphia.

"Tonsillectomy by Forceps and Snare; Thorough, Painless and Safe." E. Fletcher Ingals, Chicago. Discussion by G. Hudson Makuen, Philadelphia; W. E. Casselberry, Chicago; J. A. Stucky, Lexington, Ky.; George L. Richards, Fall River, Mass.; George B. Wood, Philadelphia; F. E. Donnellan, Philadelphia; S. H. Large, Cleveland; Edwin Pynchon, Chicago; Otto Freer, Chicago; Robert C. Myles, New York; J. A. Stucky, Lexington, Ky., and E. Fletcher Ingals, Chicago.

"The Significance of Tubercular Deposits in the Tonsils." George B. Wood, Philadelphia. Discussion by Henry L. Swain, New Haven, Conn.; J. J. Kyle, Indianapolis; C. M. Cobb, Lynn, Mass.; Emil Mayer, New York City; Robert C. Myles, New York City; E. Fletcher Ingals, Chicago; Norval Pierce, Chicago; Edwin Pynchon, Chicago; O. V. Woolen, Indianapolis; Edward R. Baldwin, Saranac Lake, New York, and George B. Wood.

Wednesday, June 8.

Appointment of Nominating Committee: B. E. Sally, Colorado Springs; George F. Cott, Buffalo, and G. Hudson Makuen, Philadelphia.

"Operative Treatment of the Faucial Tonsils, with a View to Prevention of Cervical Adenitis and General Infection." Robert C. Myles, New York City. Discussion by J. A. Stucky, Lexington, Ky.; Edwin Pynchon, Chicago; Oliver Tydings, Piqua, O., and Robert C. Myles, New York.

"Atrophic Nasopharyngitis Due to Systemic Disturbances." J. A. Stucky, Lexington, Ky. Discussion by L. C. Cline, Indianapolis; Sargent Snow, Syracuse, New York; S. L. Vansant, Philadelphia; George B. McAuliffe, New York; C. M. Baker, Bay City, Mich.; Robert C. Myles, New York, and J. A. Stucky, Lexington, Ky.

"Developmental Vestiges in the Human Pharynx as Sources of Irritation." Norval Pierce, Chicago. Discussion by J. Holinger, Chicago; W. S. Bryant, New York City; B. Alexander Randall, Philadelphia; Dunbar Roy, Atlanta, Ga.; Robert C. Myles, New York City; W. E. Casselberry, Chicago; A. Logan Turner, Edinburgh, Scotland; Christian R. Holmes, Cincinnati; John F. Barnhill, Indianapolis, and Norval Pierce, Chicago.

"Hemorrhage of the Larynx." John Edwin Rhodes, Chicago. Discussion by P. S. Donnellan, Philadelphia; W. E. Casselberry, Chicago; G. V. Woollen, Indianapolis; Dunbar Roy, Atlanta, Ga., and John E. Rhodes, Chicago.

"A Review of One Hundred Operations for the Correction of Deviation of the Nasal Septum. Remarks on Septal Operations." Joseph S. Gibb, Philadelphia. Discussion by Robert C. Myles, New York; Emil Mayer, New York; George L. Richards, Fall River, Mass.; Leon E. White, Boston; Willis S. Anderson, Detroit; H. G. Foster, Sagamore, Mass.; H. H. Briggs, Asheville, N. C.; Otto Freer, Chicago; Casper Pischel, San Francisco, and Joseph S. Gibb, Philadelphia.

Display of new instruments, by George F. Cott, Buffalo, N. Y.; W. S. Bryant, New York City; Philip D. Kerrison, New York.

"Spontaneous Tonsillar Hemorrhage." Lewis S. Somers, Philadelphia. Discussion by W. E. Casselberry, Chicago.

"Tubercular Laryngitis, Prognosis and Treatment." Thomas J. Gallaher, Denver. Discussion by W. Freudenthal, New York; Willis S. Anderson, Detroit; W. E. Casselberry, Chicago; Kate W. Baldwin, Philadelphia; Ross Hall Skillern, Philadelphia; J. Frank McConnell, Las Cruces, N. M.; Otto Freer, Chicago, and T. J. Gallaher.

"Throat Complications in Typhoid Fever." Francis J. Quinlan, New York. Discussion by Emil Mayer, New York; Kaspar Pischel, San Francisco; W. G. B. Harland, Philadelphia, and F. J. Quinlan, New York.

"Intubation, with Report of Some Unusual Cases." Burt Russell Shurly, Detroit. Discussion by George F. Cott, Buffalo; W. E. Casselberry, Chicago; Kate Baldwin, Philadelphia, and Burt Russell Shurly, Detroit.

"The Radical Operation for Chronic Suppurative Frontal Sinusitis." W. Freudenthal, New York City.

"The Operative Treatment of Chronic Suppuration of the Frontal Sinus, with Special Reference to the Method of Killian." Accompanied by lantern demonstrations. A. Logan Turner, Edinburgh, Scotland.

Discussion of Drs. Turner and Freudenthal's papers by G. L. Richards, Fall River, Mass.; Robert C. Myles, New York City; H. G. Foster, Sagamore, Mass.; Emil Mayer, New York City; G. E. Seaman, Milwaukee; Christian R. Holmes, Cincinnati; Casper Pischel, San Francisco; F. C. Ard, Plainfield, N. J.; B. Alexander Randall, Philadelphia; W. Freudenthal and A. Logan Turner.

On motion of Dr. Randall, a vote of thanks from the Section was given Dr. Turner, and the member of the House of Delegates was instructed to recommend the name of Dr. Turner for honorary membership in the Section.

THURSDAY, JUNE 9.

Dr. George L. Richards exhibited an improved medicated aural bougie for insertion into the external auditory meatus.

"The Present Status of the Treatment for Deafness Due to Chronic Catarrhal Otitis Media." Philip D. Kerrison, New York City.

"The Hot Water Douche in the Treatment of Chronic Catarrhal Deafness." G. P. Head, Chicago.

Both papers were discussed by W. S. Bryant, New York; Sargent F. Snow, Syracuse, N. Y.; William H. Fitzgerald, Hartford, Conn.; Herbert E. Smyth, Bridgeport, Conn.; J. A. Stucky, Lexington, Ky.; J. M. Ray, Louisville, Ky.; R. W. Seiss, Philadelphia; Edwin Pynchon, Chicago; John O. McReynolds, Dallas, Tex.; S. MacCuen Smith, Philadelphia; B. Alexander Randall, Philadelphia; E. B. Dench, New York City; J. J. Kyle, Indianapolis, and Philip D. Kerrison and G. P. Head.

The Nominating Committee reported through Dr. G. Hudson Makuen: Chairman, Robert C. Myles of New York; secretary, Otto T. Freer of Chicago; delegate, John F. Barnhill of Indianapolis.

"The Treatment of Otitic Septicemia." B. Alexander Randall, Philadelphia.

"Plastic Operations Following Radical and Mastoid Operations." E. B. Dench, New York City.

Both papers were discussed by Norval Pierce, Chicago; S. MacCuen Smith, Philadelphia; W. Sohier Bryant, New York City; George B. McAuliffe, New York City; H. O. Reik, Baltimore; Thomas Hubbard, Toledo, O.; George L. Richards, Fall River, Mass.; J. A. Stucky, Lexington, Ky.; G. Hudson Makuen, Philadelphia; E. B. Dench, New York City; J. Holinger, Chicago; Robert C. Myles, New York City, and B. A. Randall and E. B. Dench.

"The Palliative Treatment of Acute Mastoiditis and Its Limitations." Philip Hammond, Boston. Discussion by R. W. Seiss, Philadelphia; E. B. Dench, New York City; Kasper Pischel, San Francisco; George L. Richards, Fall River, Mass.; S. H. Large, Cleveland; C. M. Baker, Bay City, Mich.; Sargent F. Snow, Syracuse, N. Y.; George B. McAuliffe, New York City, and Philip Hammond.

Exhibition of instruments. J. H. Abraham, New York City. Discussion by Robert C. Myles, New York City; C. M. Cobb, Lynn, Mass.; Norton L. Wilson, Elizabeth, N. J.

"Tuberculosis of Both Middle Ears in an Infant." Dunbar Roy, Atlanta, Ga. Discussion by C. M. Cobb, Lynn, Mass.; B. Alexander Randall, Philadelphia, and Dunbar Roy.

Election of officers: Chairman, Robert C. Myles, New York City; secretary, Otto T. Freer, Chicago; delegate, John F. Barnhill, Indianapolis.

Addresses by Drs. Myles and Freer.

"Some Considerations Arising from the Difficulty of Choice of a Time for Mastoid Operation; Prospective Results." D. A. Kuyk, Richmond, Va. Discussed by B. Alexander Randall, Philadelphia; John F. Barnhill, Indianapolis; George B. McAuliffe, New York City; Otto T. Freer, Chicago; Herbert E. Smyth, Bridgeport, Conn.; D. J. McDonald, New York City; E. B. Dench, New York City, and D. A. Kuyk.

"Two Cases of Objective Aural Tinnitus Due to the Action of the Tubopalatal Muscles." Walter A. Wells, Washington, D. C. Discussion by W. S. Bryant, New York City; Christian R. Holmes, Cincinnati.

Materia Medica, Pharmacy and Therapeutics.

TUESDAY, JUNE 7.

Address of Chairman, "The Scourge of Nostrums and Irregular Practitioners," Oliver T. Osborne, New Haven, Conn. The address was referred to a committee of Tompkins, West Virginia; Wiley, District of Columbia, and Wood, Pennsylvania which reported in favor of the recommendations: 1, the election of a Vice Chairman; 2, the appointment of a committee to assist the Postoffice Department in excluding objectionable advertisements from the mails.

Report of Committee on Proprietary Medicines, Henry H. Moody, Mobile, Ala.; William J. Robinson, New York, and Carl S. N. Hallberg, Chicago. On motion of S. Solis-Cohen, Pennsylvania, referred to the Association for publication in THE JOURNAL.

REPORT OF THE COMMITTEE ON PROPRIETARY MEDICINES.

To the Section:

The committee to which was referred the subject of Proprietary Medicines at the last Session (1903) respectfully reports:

The work of this Section last year with reference to Proprietary Medicines, while without any apparent tangible results, demonstrated:

1. That the modification or correction of the promiscuous employment of Proprietary Medicines is really a "burning question," the solution of which is of vital interest to the medical profession.

2. That such reform must proceed on scientific lines, by gradual elimination of the most objectionable medicines and their exclusion from medical patronage, so that we may in the time to come, by a process of segregation, differentiate between such articles as may not be objectionable *per se*, but at present do not conform to the ethics of medical practice or to the precepts of the Association.

3. That the American Medical Association is the only great body to grapple with this question; this Section the proper one for initiating the work, and THE JOURNAL of the Association the agency through which its efforts may be sustained and its ultimate object be accomplished.

As has often been pointed out, promiscuous condemnation serves no purpose except to antagonize and confuse, and is the chief reason why no reform has been effected.

The memorial presented at the close of last year's session recommended: "That some well-considered plan should be inaugurated for the differentiation of the thousands of medicinal articles and specialties to remove the present confusion among physicians and pharmacists alike, to afford some kind of criteria as to their ethical status and to separate the true from the false."

It is believed that this can be best accomplished by adopting certain definite principles as a guide for excluding objectionable medicinal articles from the medical journals, through which their patronage by the profession is chiefly derived.

THE CARDINAL PRINCIPLES.

The following principles are, therefore, proposed to govern the rejection of advertisements in medical journals.

Articles to be refused admission:

1. Medicinal articles of secret composition.
2. Articles for internal medicinal use, advertised, or in any manner exploited, as remedies or cures to the laity.
3. Medicinal articles of known composition whose formulas do not give the exact quantities of the active medicinal agents and their names in recognized scientific terms.
4. Articles with trade names, without the true scientific chemical name.
5. Mixtures or pharmaceutic preparations, without a pharmaceutic title which describes its pharmaceutic character and the principal active ingredients.

First—To the first proposition no medical man can possibly object.

Second—The same may be said of the second proposition. Certain articles such as antiseptics, disinfectants, cosmetics and dietetics when not harmful, and mineral waters, when not exploited as cures or remedies, may be exempt.

Many articles in this group, however, have received medical favor only subsequently to be exploited to the laity as remedies through the testimonials of medical men.

They require strict supervision and should be quickly excluded and promptly exposed whenever their makers stray from the ethical position.

Third—Many articles give formulas which do not disclose the exact quantities of the active medicinal agents. It is not necessary to enumerate all the ingredients, the character of the vehicle nor the method of preparation, but the quantities of the active medicinal agents must be stated.

In some preparations the medicinal agents are named incorrectly, or illusively; these must be given in correct scientific terms which permit of no misinterpretation or deception.

Fourth—The bane of the physician, as well as of the pharmacist, is the use of arbitrarily selected, or coined, so-called, copyrighted or trade names. The multiplication of these has grown so as to cause great confusion and seriously threaten careful administration. Physicians, like other persons in these strenuous times, desire to save time—and thought—and have thus fallen into "the trap of convenience." While in the beginning this custom presented apparently no great objection, it is now and has been for several years, a serious phase of this problem.

There is no need of enumerating the many examples of names, almost similar, applied to vastly different medicines. With some two thousand German synthetics alone, this system of nomenclature has become almost a nightmare to those who try to keep up with the "modern" materia medica.

Until some uniform system of nomenclature is adopted, these articles should be required to give in addition to the trade name also the correct chemical or scientific name.

THE TRADE-NAME EVIL.

Pharmaceutic preparations and mixtures should give a pharmaceutic title that is the generic name of the class of which it may be

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a member viz.: Tincture, elixir, liquor, powder, capsule, etc., and the specific name, so as to afford at once a fair idea as to the character and composition of the article.

For this purpose therapeutic terms should be excluded, since they are empiric and also serve to promote self-prescription by the laity.

Physicians in adopting and employing trade names, pharmaceutic mixtures, not only aid in confusing the materia medica, but play directly into the hands of the patent-medicine men. If preference is desired for an especial brand, it should be so designated by specifying the name of the brand or the maker *after* the scientific, chemical or pharmaceutic name. Failure to recognize this principle, through the temptations to use shortcuts, has familiarized the public with hypnotics and other habit-forming medicines often to the infinite harm of the individual, to the irreparable loss of prestige of the profession, to the injustice of pure pharmacy and to the unequivocal financial disadvantage of the physician.

LEGITIMATE MANUFACTURERS.

While the principles set forth may not cover the entire field of medicinal articles patronized by the medical profession, yet their general application would be a decided advance and of great benefit to all legitimate interests. Aside from the medical necessity which exists for this reform, manufacturers engaged in the legitimate exploitation of ethical and valuable medicinal articles demand relief. Old historic houses, chemists and pharmacists of national reputation, who have contributed so much to the advance of rational therapeutics through improved processes and inventions, should be given some recognition as against the nondescript, anonymous "chemical companies," mostly composed of persons without any claim to scientific knowledge and whose sole object is to hoodwink the medical profession into the use of their "stuff," only to afterward, through misrepresentation and audacity, "work the public."

THE PLAN EFFECTIVE.

To make this proposed plan effective it is essential that a committee or bureau be formed to supervise the work. To proceed with the greatest caution and do no injustice, the claims of every doubtful article should be carefully examined by a group of experts. This committee might work in conjunction with similar committees of the American Pharmaceutical Association, the Committee on Revision of the U. S. Pharmacopeia and the National Formulary and the Drug Laboratory of the Bureau of Chemistry of the Agricultural Department and similar organizations of the federal government.

Inasmuch as this work would be of great financial benefit to legitimate advertisers and incidental to THE JOURNAL, it is recommended that this Section, in the event of the approval of this report and the adoption of the principles announced, ask the Board of Trustees of the American Medical Association to make such provision as may be required, to adequately inaugurate this proposed plan.

"Federal Supervision of Drugs," Harvey W. Wiley, Washington.

"Eighth Decennial Revision of the Pharmacopeia of the U. S. A." Joseph P. Remington, Philadelphia.

"The Relation of the Physician to Proprietary Remedies. How May Substitution be Avoided and the Desired Preparation Obtained Without Unduly Advertising the Manufacturer?" William J. Robinson, New York.

These papers were discussed by H. C. Wood, Jr., Philadelphia; Theodore Potter, Indiana; C. B. Lowe, Philadelphia; H. C. Beaton, Philadelphia; Adolph Koenig, Pittsburg, Pa.; Thomas L. Coley, Philadelphia; M. I. Wilbert, Philadelphia; W. C. Wescott, Atlantic City, N. J.; N. Schweitzer, New York (by permission); Wiley, Remington and Robinson.

The Secretary presented the following names of members of the American Pharmaceutical Association, who had been recommended by the officers of the Section for pharmaceutical members according to Article III, Section 6 of the by-laws, and they were then unanimously elected by ballot by the members of the Section: Joseph P. Remington, Philadelphia; Clement B. Lowe, Philadelphia; Martin I. Wilbert, Philadelphia; Harvey W. Wiley, Washington; Alfred R. L. Dohme, Baltimore; Harvey H. Hynson, Baltimore. At a subsequent meeting Joseph W. England, Philadelphia, was also elected. A number of names of other candidates were referred for further consideration.

The Secretary presented the credentials from the American Pharmaceutical Association of the following delegates to the Section: J. P. Remington, Philadelphia; C. B. Lowe, Philadelphia; M. I. Wilbert, Philadelphia; H. K. Mulford, Philadelphia; F. T. Gordon, Washington, D. C.; H. W. Wiley, Washington, D. C.; L. F. Kebler, Washington, D. C.; L. C. Spangler, Lewes, Del.; A. R. L. Dohme, Baltimore; D. M. R. Culbreth, Baltimore; A. M Roehrig, Stapleton, N. Y.; R. G. Eccles, Brooklyn; E. H. Squibb, Brooklyn; Thomas P. Cook, New York City; Eustace H. Gane, New York City; C. A. Mayo, New York City; H. H. Rusby, New York City; W. L. Scoville, Boston; W. C. Wescott, Atlantic City, N. J.; George M. Beringer, Camden, N. J.; Charles Holzhauer, Newark, N. J.; George W. Parisen, Perth Amboy, N. J.; R. H. Rhode, Chicago; C. H. Wood, Chicago; Joseph Helfman, Detroit; A. B. Lyons, Detroit; C. G. Merrell, Cincinnati; George B. Kauffman, Columbus, O.; O. H. C. Klie, St. Louis; A. J. Schoettlin, Louisville, Ky.

The report was received, and on motion the persons named were tendered the privilege of the floor during the session.

WEDNESDAY, JUNE 8—MORNING.

The Chairman appointed the following committee to aid the Postoffice Department in excluding objectionable advertisements: C. S. Hallberg, H. W. Wiley, H. C. Wood, Jr.

"The Relation of the Internal Secretions to Epilepsy, Puerperal Eclampsia and Kindred Convulsive Disorders," Charles E. D. Sajous, Philadelphia. Discussion by H. Stern, New York; C. B. Lowe, Philadelphia, and C. E. D. Sajous.

"The Indications for and the Value of the Various Hypnotic Drugs," Allan R. Diefendorf, Middletown, Conn. Discussion by Lowe, Robinson, New York; J. W. Foss, Arizona; W. C. Wescott, New Jersey; W. F. Waugh, Illinois; Sajous, Stern, W. W. Tompkins, West Virginia; Joseph Clements, New Jersey; Osborne and Diefendorf.

"Chronic Arterial Hypertension," Henry W. Cook, Richmond, Va.

"Vasodilatation and Its Production by Drugs," Arthur R. Elliott, Chicago, was not read, but the subject was discussed by Noble P. Barnes, Sajous, Waugh, Wood, Robinson, Clements, Tompkins, Osborne and Cook.

"The Control of Internal Hemorrhage by Drugs," Thomas Coley, Philadelphia. Discussion by William J. Robinson, Waugh, W. J. Abbott, Wood, Cook, Sajous and Coley.

WEDNESDAY, JUNE 8—AFTERNOON.

A symposium on the Artificial and Pathologic Perversions of Metabolism and Their Relation to Gout, was read with the following papers:

"Drugs Irritant to the Kidneys and Hence to be Avoided in Impaired Kidney Function," by Torald Sollmann, Cleveland; read by Robert A. Hatcher, Cleveland, O.

"Some Aspects of the Newer Physiology of the Gastrointestinal Canal," Lafayette B. Mendel, New Haven, Conn.

"The Etiology and Pathology of Gout," Thomas B. Futcher, Baltimore.

"The Uric Acid Delusion and the Prevention of Gout," by Woods Hutchinson, Portland, Ore.; read by H. C. Wood, Jr.

"The Systemic Value of Radical Changes in Diet" Russell H. Chittenden, New Haven, Conn.

The symposium was discussed by Fenton B. Turck, Chicago; H. Stern, Boardman Reed, Philadelphia; S. Solis-Cohen, H. W. Wiley, District of Columbia; Lowe, Mendel, Futcher and Wood.

THURSDAY, JUNE 9—MORNING.

"Hydrastis: Some of Its Therapeutic Uses," W. Blair Stewart, Atlantic City. Discussed by W. R. White, Providence, R. I.; W. F. Waugh, Illinois; Lowe, Stern and Stewart.

"Apocynum Cannabinum," Horatio C. Wood, Jr., Philadelphia. Discussed by Lowe, Hallberg, Remington and Wood.

"The Rational Application and Value of Specific Treatment for Tuberculosis," Edward R. Baldwin, Saranac Lake, N. Y. Discussion by V. Y. Bowditch, Boston; Edward O. Otis, Boston; R. C. Newton, New Jersey; John W. Foss, Phoenix, Arizona; C. L. Minor, North Carolina; J. H. Lowman, Ohio; Lawrason Brown, New York; J. H. Elliott, Gravenhurst, Ont., Canada.

THURSDAY, JUNE 9—AFTERNOON.

The report of the Nominating Committee was presented, when on motion of W. F. Waugh, Illinois, nominations were ordered from the floor and the following were elected for the ensuing year: Chairman, Heinrich Stern, New York; Vice Chairman, William J. Robinson, New York; Delegate, J. W. Foss, Phoenix, Arizona; Secretary, C. S. N. Hallberg, Chicago.

The Section adopted a resolution that the title of the Section should be: Section on Pharmacology and Therapeutics, instead of simply Section on Pharmacology, and ordered the resolution transmitted to the House of Delegates through the President, Dr. Musser.

The Section ordered the Delegates to present the recommendation of the Committee on Proprietary Medicines to the House of Delegates, asking the Board of Trustees of the American Medical Association to make such provision as may be required to adequately inaugurate this proposed plan.

"The Therapeutic Value of Massage in Acute Disease," Jay W. Seaver, New Haven, Conn. Discussed by J. W. Foss, Phoenix, Arizona; R. C. Newton, New Jersey; H. Stern and J. W. Seaver.

"The Year's Progress in Actinotherapy," William S. Gottheil, New York.

"Pharmacodynamics from the Viewpoint of Osmology and an Outline of a System of Osmotherapy," Heinrich Stern, New York.

A symposium on Pneumonia was read, with the following papers:

"The Value of Internal Medication and of External Local Applications," George Dock, Ann Arbor, Mich.

"The Prevention and Management of Cardiac Failure," Solomon Solis-Cohen, Philadelphia.

"The Value of Serum Treatment," John M. Anders, Philadelphia.

The symposium was discussed by F. R. Weber, Milwaukee, Wis.; Theodore Potter, Indianapolis; H. C. Wood, Jr., Philadelphia; David S. Funk, Harrisburg, Pa.; W. R. White, Rhode Island; A. O. Stranahan, New York; O. T. Osborne, Dock and Cohen.

The Section adopted the following by-law to control the election of pharmaceutical members:

Pharmacists desiring to become pharmaceutical members must present their names to the county medical society in the county in which they may be practicing pharmacy three months preceding the annual session, and on approval of the county medical society their names shall be submitted to the officers of the Section according to Article III, Section 6.

On motion of M. I. Wilbert, Philadelphia, it was ordered that the Chairman appoint a Committee on Proprietary Medicines to report next year.

The following papers, whose authors were absent in the House of Delegates, were by unanimous consent read by title and referred for publication:

"Therapy of Arsenic," H. N. Moyer, Chicago. "Etiology and Treatment of Recurrent Headaches," Gustavus Eliot, New Haven, Conn. "The Present Status of Streptococcus and Tetanus Antitoxin Injections," Victor C. Vaughan, Ann Arbor, Mich. "The Physical and Psychic Effects of Hydrotherapy," George F. Butler, Alma, Mich.

On motion, after thanks to the retiring Chairman, the Section adjourned.

Section on Pathology and Physiology.

TUESDAY, JUNE 7—MORNING.

Chairman's Address: "The Relation of the Section on Pathology and Physiology to the Other Sections of the Association," by Dr. Joseph McFarland, Philadelphia.

"Will the Long-Continued Administration of Digitalis Induce Cardiac Hypertrophy?" by Dr. Frank B. Wynn, Indianapolis. Discussed by Drs. Hervey, Hall and Wynn.

"Secondary Manifestations of Hypernephromata," by Dr. Walter L. Bierring and Dr. Henry Albert, Iowa City, Ia. Read by Dr. Bierring. Discussed by Drs. MacCallum, Stokes, Bierring, Wynn, McFarland and Coplin.

"The Character of the Chromatophores," by Dr. Leo Loeb, Philadelphia.

Report on the Metabolism of a Case of Diabetes Mellitus," by Dr. Graham Lusk, New York City. Discussed by Drs. Vaughan, Hall and Lusk.

TUESDAY, JUNE 7—AFTERNOON.

"Regenerative Changes in Cirrhosis of the Liver," by Dr. W. G. MacCallum, Baltimore. Discussed by Drs. Loeb, Adler, Libman, McFarland, Herring and MacCallum.

On motion Dr. W. S. Hall, Chicago, was allowed to read two papers (abstracted into the time limit of one): "The Relation of Chest Contour to Lung Capacity," by Dr. F. F. Malone, Chicago, and "Mathematical Relations of Chest Dimensions," by Dr. Hall.

On motion, the discussion of these two papers was dispensed with owing to the lateness of the hour.

"Notes on Vaccine," by Dr. Charles J. McClintock, Detroit. Discussed by Drs. Rosenau, Bergey, Ohlmacher and McClintock.

WEDNESDAY, JUNE 8.

"Uncinariasis in the South, with Special Reference to Mode of Infection," by Dr. Claude A. Smith, Atlanta, Ga. Discussed by Drs. Ward and Smith.

"The Nature and Significance of Leucocytosis," by Dr. A. Mansfield Holmes, Denver. Discussed by Drs. Christian and Holmes.

"Further Observations on Leucocytotoxins," by Dr. Henry A. Christian and Dr. Thomas F. Leen, Boston. Read by Dr. Christian. Discussed by Drs. Bergey and Christian.

"Studies on Antistreptococcus Serum," by Dr. D. H. Bergey, Philadelphia.

"A Bacteriologic and Clinical Investigation of a Curative Serum for Typhoid Fever," by Dr. William Royal Stokes, and Dr. John S. Fulton, Baltimore. Read by Dr. Stokes. Discussed by Drs. Yarborough, Stokes and McFarland.

On motion of Dr. C. A. Smith, a Nominating Committee was appointed.

"Bone Cysts. A Consideration of the Benign and Adamantine Dentigerous Cysts of the Jaw, and Benign Cysts of the Long Pipe Bones" (with lantern slide demonstration), by Dr. Joseph C. Bloodgood, Baltimore. Discussed by Drs. Hall and Bloodgood.

"Note on Ascaris Texana: a Hitherto Undescribed Ascaris Parasitic in the Human Intestine," by Dr. Allen J. Smith, Philadelphia, and Dr. Richard A. Goeth, San Antonio, Tex. Read by Dr. Smith.

THURSDAY, JUNE 9.

"The Physiology of the Middle Ear," by Dr. J. Hollinger, Chicago. Discussed by Dr. Hall.

"Anatomy of Bartholin's Glands; Cysts of Bartholin's Glands," by Dr. Thomas S. Cullen, Baltimore.

"Further Studies on Bacterial Intracellular Toxins," by Dr. Victor C. Vaughan, Ann Arbor. Discussed by Drs. Terrill, Clements, Sewall, Meltzer, Hall and Vaughan.

The Section passed a resolution of thanks to Dr. Vaughan and his department for the epoch-making work that he is doing.

In a discussion of the question whether the section favored the Association session next year on the Pacific coast, the Section directed its members in the House of Delegates that it left them uninstructed, and to use their own judgment.

"The Pelvic Urethral Sheath and Its Relation to the Extension of Carcinoma Cervicis Uteri," by Dr. John A. Sampson, Baltimore.

On motion of Dr. Stokes, Baltimore, it was resolved that members of the Section be permitted to consult with the General Secretary of the Association, and make arrangements for the publication of papers elsewhere, as well as in THE JOURNAL.

On motion of Dr. Rosenau, the Secretary was instructed to cast a ballot on nominations, presented by the Nominating Committee, which resulted in the election unanimously of Dr. Winfield S. Hall, Chicago, as Chairman; Dr. Henry A. Christian, Boston, as Secretary and Dr. Joseph McFarland, Philadelphia, as Delegate.

"The Passage of Different Foodstuffs from the Stomach," by Dr. W. B. Cannon, Boston. Discussed by Drs. Hall, Harrington, Bergey, Turck, Smith and Cannon.

"Extensive Thrombosis of the Sinuses of the Cerebral Dura, with a Report of Two Cases," by Dr. William H. Spiller, and Dr. C. D. Camp, Philadelphia. Read by Dr. Camp. Discussed by Drs. Welch and Libman.

Dr. E. E. Southard presented, in the time limit of one paper, "A Case of Diffuse Encephalitis Showing the Pneumococcus," by Dr. W. N. Bullard and Dr. F. R. Sims, and "A Case of Cortical Hemorrhage Following Scarlet Fever," by Dr. E. E. Southard and Dr. F. R. Sims, all of Boston.

"Borated Food as a Cause of Kidney Lesions," by Dr. Charles Harrington.

By courtesy of the Section, Dr. M. Miyashima, of the Imperial Japanese Institute for Investigation of Infectious Diseases, Tokio, Japan, read a brief paper on his work on the subject of malaria in Japan. In Japan he finds but one form of mosquito to exist, and but one form of malaria. In Formosa, on the other hand, there are several forms of mosquito of the anopheles group, and here more than one form of malaria is found. He presented drawings and photographs of some of these mosquitoes, and contributed the very important observation that of these mosquitoes there are some which can convey only one form of malaria, and not other forms of the disease. Beside this, he presented a method of preserving and staining cultures of bacteria in Petri dishes, which give very beautiful results. Dr. Miyashima's paper was discussed by Dr. Welch.

FRIDAY, JUNE 10.

"Malignant Endotracheal Tumor, Simulating Aneurism," by Dr. Judson Daland, and Dr. Joseph McFarland, Philadelphia. (As to its clinical aspects, by Dr. Daland, and as to its pathologic aspects, by Dr. McFarland, the latter using lantern slides in the presentation).

Dr. McFarland also gave a demonstration of a series of slides presented by Dr. John V. Shoemaker.

"The Influence of Posture on the Pulse Rate and Blood Pressure," by Dr. O. E. Stephens, Chicago. Read in abstract by Dr. Hall, Chicago. Discussed by Drs. Brainerd and Hall.

On motion of the Secretary, the Section voted to request the editor of THE JOURNAL to publish in THE JOURNAL and in the transactions the paper presented by Dr. Miyashima, on work done on malaria in the lymph institution, Department of Interior, Tokio, Japan, under the direction of Professor Kitasato.

On motion of the Secretary, the Section recommended for publication in THE JOURNAL and in the proceedings the paper entitled "The Mechanism of Streptococcus Infections," by Dr. G. F. Ruediger, Chicago, under a grant of the Association.

"Experiments Illustrating Physiologic Optics," by Dr. Winfield S. Hall. Discussed by Drs. Randall and Hall.

"Chylous (Milky) Ascites, with Eosinophilia, and an Analysis of Reported Cases," by Dr. L. Napoleon Boston, Philadelphia.

"A Case of Early Acute Pancreatitis, Without Hemorrhage," by Dr. H. H. Germain and Dr. Henry A. Christian, Boston. Read by Dr. Christian.

"The Pathologic Histology of Adipose Tissue," by Dr. Henry A. Christian. Discussed by Drs. McFarland and Boston.

As the outcome of research under a grant from the Association, Dr. C. W. Duval, Boston, read a paper, "Another Member of B. Dysenteriæ Group." Discussed by Drs. Libman, Page, Christian and Duval.

ATLANTIC CITY REGISTRATION.

List of Members, Associate Members and Guests Who Registered at the Atlantic City Session.

The total registration at the Atlantic City Session was 2,990. As we have stated, this is the largest registration of any session in the Association's history. We print below the names and addresses of the members, associate members and guests who registered. The names that are starred are of associate members or guests. Preceding the names are two summaries: one giving the registration by states and one by sections. In the latter are mentioned "Miscellaneous, 65." This includes those who have not forwarded credentials for membership and those who did not sign their names distinctly, or who failed to fill out the card for publication. These are not counted in the summary by states.

REGISTRATION BY SECTIONS.

Practice of Medicine	838
Obstetrics and Diseases of Women	298
Surgery and Anatomy	720
Hygiene and Sanitary Science	64
Ophthalmology	261
Diseases of Children	169
Stomatology	35
Nervous and Mental Diseases	165
Cutaneous Medicine and Surgery	60
Laryngology and Otology	137
Materia Medica, Pharmacy and Therapeutics	52
Pathology and Physiology	46
Registered without specifying any particular section	111
Miscellaneous	65
Total	2,990

REGISTRATION BY STATES.

Alabama	18	Montana	7
Arkansas	30	Nebraska	14
Arizona	3	New Hampshire	10
California	42	New Jersey	221
Colorado	27	New Mexico	5
Connecticut	70	New York	383
Delaware	14	North Carolina	1
District of Columbia	55	North Dakota	6
Florida	5	Ohio	142
Georgia	19	Oklahoma	1
Idaho	1	Oregon	9
Illinois	150	Pennsylvania	846
Indian Territory	1	Rhode Island	19
Indiana	57	South Carolina	22
Iowa	36	South Dakota	8
Kansas	9	Tennessee	44
Kentucky	45	Texas	22
Louisiana	14	Utah	11
Maine	14	Vermont	19
Maryland	91	Virginia	41
Massachusetts	95	Washington	5
Michigan	60	West Virginia	34
Minnesota	31	Wisconsin	37
Mississippi	13	Wyoming	2
Missouri	38	Foreign	32

Section on Practice of Medicine.

Abernathy, Thomas E., Chattanooga, Tenn.
Acher, T. J., Croton-on-Hudson, N. Y.
Affleck, H. S., Bellows Falls, Vt.
Alleman, H. M., Hanover, Pa.
Allen, J. S., Washington, D. C.
Allen, Luther M., Philadelphia.
Allen, Van. H. W., Springfield, Mass.
Allyn, Herman B., Philadelphia.
Alter, J. G., New Kensington, Pa.
Ander, Frank P., Carbon, Ia.
Ames, R. P. M., Springfield, Mass.
Amerland, J. H., St. Louis.
Anders, Howard S., Philadelphia.
Anders, J. M., Philadelphia.
Anderson, William E., Farmville, Va.
Anspaar, Benjamin H. S., Sublette, Ill.
Apple, S. S., Easton, Pa.
Appleton, Mary, New York.
Archer, William A., Houston, Tex.
Ash, H. St. Clair, Philadelphia.
Ashcraft, Samuel F., Mullica Hill, N. J.
Ashley, W. W., Ouray, Colo.

Ashton, Thos. G., Philadelphia.
Atwood, John W., Fishkill-on-Hudson, N. Y.
Babcock, Robert H., Chicago.
Bachmantoe, M. J., Emaus, Pa.
Bailey, Saml., Mt. Ayr, Ia.
Baker, Eugene, Ithaca, N. Y.
Baker, F. Kline, Philadelphia.
Bannan, Theresa, Syracuse, N. Y.*
Barber, T. L., Charleston, W. Va.
Barshinger, M. L., York, Pa.
Barrier, J. M., Delhi, La.
Barlow, W. Jarvis, Los Angeles.
Bass, Chas. C., Columbia, Miss.
Batten, John M., Downingtown, Pa.
Bauer, L. D., Philadelphia.
Beatty, H. M., Trenton, N. J.
Beck, J. E., Dayton, O.
Beckett, H. C., Scottsburg, Va.
Beetham, A. C., Bellaire, O.
Bell, John W., Minneapolis.
Bennet, W. H., Chicago.
Bennett, John W., Long Branch, N. J.
Bennett, W. H., Philadelphia.
Berner, David, Atlantic City.
Bernheim, Albert, Philadelphia.
Bernheim, Louis, Butte, Mont.
Berry, Edward S., Shippensburg, Pa.
Bettmann, H. W., Cincinnati.
Bierring W. L., Iowa City, Ia.
Bill, Benj. J., Genoa Junction, Wis.
Bill, C. H., Bridgeport, Conn.
Billings, Frank, Chicago.
Birney, H. H., Philadelphia.
Bishop, Louis F., New York.
Black, Wm. T., Memphis, Tenn.
Blackburn, A. H. Philadelphia.
Blankenhorn, H., Orrville, O.
Blundell, Wm., Paterson, N. J.
Bodine, J. M., Louisville.
Bolin, Jesse A., Philadelphia.
Bonnet, A. O., Columbus, O.
Bonney, S. G., Denver, Colo.
Bonham, Jas. M., Hobart, O. T.
Bowman, H. C., Mahanoy City, Pa.
Bowditch, V. Y., Boston.
Boyce, D. C., Allegheny, Pa.
Bradshaw, L. L., New York.*
Brannan, John W., New York.
Brattain, G. E., Paulding, O.
Brayton, C. E., Stonington, Conn.
Breuer, E. J., Shabbona, Ill.
Brodbeck, John R., Codorus, Pa.
Broidrick, Jas. P., Boston.
Brobeck, A. L., Hoopeston, Ill
Brooke, Roger, Sandy Springs, Md.
Brown, Lawrason, Saranac Lake, N. Y.
Brown, Ellen B., Chester, Pa.
Brown, Otis S., Warren, Pa.
Browning, C. C., Highland, Cal.
Broyles, Chas. J. Johnson City, Tenn.
Brunning, F., Cincinnati.
Buermann, W., Newark, N. J.
Burke, Joseph J., Philadelphia.
Burnham, Clark James, San Francisco.
Burnham, M. P., Gaffney, S. C.
Burroughs, James A., Asheville, N. C.
Burroughs, H. S., Pittsburg.
Bushey, S. G., Camden, N. J.
Butterworth, W. W., New Orleans, La.
Byrne, Patrick J., New York.
Cabot, R. C., Boston.
Cahall, W. C., Germantown, Pa.
Cameron, G. A., Germantown, Philadelphia.
Campbell, A. D., Cleveland.
Campbell, C. L., Sherardsville, Pa.
Campbell, D., Butte, Mont.
Campbell, E. R., Bellows Falls, Vt.
Carmichael, J. W., Knoxville, Tenn.
Carpenter, A. E., Boonton, N. J.
Carroll, J. R., Hatboro, Pa.
Carson, S. C., Greensboro, Ala.
Castleman, H. L., Sylacauga, Ala.
Cathell D. W., Baltimore.
Caywood, J. E., Piqua, O.
Champlin, John, Westerly, R. I.
Chestnut, J. C., Philadelphia.
Chew, E. C., Atlantic City.
Chipman, J. C., Sterling, Colo.
Christopher, W. H., London, O.
Clark, C. E., Youngstown, O.
Clark Robt. C., Pittsburg.
Clark, Wm. A., Trenton, N. J.
Cobleigh, E. A., Chattanooga.
Coe, John W., New York.
Coffman, John J., Scotland, Pa.
Coleman, H. B., Columbus, O.
Coleman, T. D., Augusta, Ga.
Collins, C. E., Crisfield, Md.
Condon, A. S., Ogden, Utah.
Congdon, W. O., Cuba, N. Y.
Connor, G. L., Detroit.
Cooper, C. B., Honolulu, Hawaii.
Cooper, J. C., Philadelphia.
Cordell, E. F., Baltimore.
Corl, H. E., Middlebranch, O.
Cornell, I. M., Wappingers Falls, N. Y.*
Corson, Susan R., Lansdowne, Pa.
Corss, Frederic, Kingston, Pa.
Councilman, W. T., Boston.
Cox, James A., Morgantown, W. Va.
Craig, J. M. New York.
Craig, Frank A., Philadelphia.
Crawford, Jas. E., Philadelphia.
Crewitt, J. A., Newtown, Pa.
Culkins, J. E., Rochester, N. Y.
Cummins, G. W., Belvidere, N. J.
Cunningham, T. M., Marquette, Mich.
Curtin, R. G., Philadelphia.
Curtiss, R. M., Marengo, Ill.
Cutler, Elbridge G., Boston.
Daggett, Wm. G., New Haven, Conn.
Daland, Judson, Philadelphia.
Danforth, I. N., Chicago.
Dare, Geo. S., Rising Sun, Md.
Davis, H. K., East Orange, N. J.
Davis, Jeff., Toccoa, Ga.
Davis, N. S., Jr., Chicago.
Davis, T. D., Pittsburg.
Davis, Theo. G., Bridgeton, N. J.
Davis, W. A., Camden, N. J.
Davis, Wm. H. K., East Orange, N. J.
Davis, Wm., St. Paul.
Day, G. E., Strasburg, Pa.
Delaney, W. E., Slate Run, Pa.
Denison, Ellery, New York.
Dercum, Clara T., Philadelphia.
De Silver, J. F., Atlantic City.
Dewey, H. W., Tacoma, Wash.
Dibrell, E. R., Little Rock, Ark.
Dice, Seth D., Xenia, O.
Dickes, J. T., Portland, Ind.
Dickson, W. R., McDonald, Pa.
Diverty, H. B., Woodbury, N. J.
Divine, Alice, Ellenville, N. Y.
Dock, George, Ann Arbor, Mich.
Dodin, Henry A., New York.
Donaldson, J. B., Canonsburg, Pa.
Doty, E. A., Oxford, Ia.
Dotterer, C. B., Eaglesville, Pa.
Douglas, W. E., Middletown, N. Y.
Dougherty, M. M., Mechanicsburg, Pa.
Drechsler, William, Denver.
Drennen, C. T., Hot Springs, Ark.
Drips, J. H., Philadelphia.
Drummond, W., Philadelphia.
Dubbs, J. H., Philadelphia.
Dunmire, G. B., Philadelphia.
Eastman, H. A., Jamestown, N. Y.
Eastman, R. D., Berkshire, N. Y.
Eberle, J. G., Ft. Smith, Ark.
Eby, Jas. R., Newport, Pa.
Eckert, J. W., Temple, Pa.
Eckman, P. N., Philadelphia.
Edson, C. E., Denver.
Edsall, D. L., Philadelphia.
Einhorn, Max, New York.
Eisenberg, J. L., Norristown, Pa.
Ellenberger, J. W., Harrisburg, Pa.
Ellinwood, A. G., Attica, N. Y.
Ellis, Aller G., Philadelphia.
Elmer, William, Trenton, N. J.
Elsner, H. L., Syracuse, N. Y.*
Elwell, Alfred M., Camden, N. J.
Ely, Wm. S., Rochester, N. Y.*
Emmerling, Karl, Pittsburg.
English, D. E., Millburn, N. J.
Erdman, Wm. B, Macungie, Pa.
Erdman, Wm. T., Buckingham, Pa.
Erwin, R. W., Bay City, Mich.
Evans, D. W., Scranton, Pa.
Ewing, W. B., West Grove, Pa.
Eyestone, A. G., Gibsonburg, O.
Faries, C. T., Narberth, Pa.
Farquhar, Chas., Olney, Md.
Fassett C. W., St. Joseph, Mo.
Fehlen, A., San Francisco.
Ferguson, E. W., Somerville, N. J.
Ferguson, F., New York.
Ferguson, Wm. N., Philadelphia.
Fish, C. M., Pleasantville, N. J.
Fish, Samuel A., Denver.
Fisher, J. C., Elmira, N. Y.
Fisher, M. O., Clear Creek, Utah.
Fisler, C. F., Clayton, N. J.
Fitch, T. S. P., East Orange, N. J.
Fitch, A. E., Factoryville, Pa.
Fitz, Reginald H., Boston.
Fitzgerald, D. J., Glens Falls, N. Y.
Fleckenstine, Horace, Newportville, Pa.
Fleisher, Rebecca, Philadelphia.
Fleming, J. C., Elkhart, Ind.
Fleming, N. J., Philadelphia.
Floyd, J. C. M., Steubenville, O.
Flynn, E. H., Marquette, Mich.
Forman, L. H., Buckhannon, W. Va.
Foster, W. E., Crafton, Pa.
Foster, W. S., Pittsburg.
Foshay, P. M., Chicago.
Fountain, J. H., Chapin, Ill.
Foster, J. P. C., New Haven, Conn.
Fox, C. J., Willimantic, Conn.
Francine, Albert P., Philadelphia.
Frank, G. S., Millheim, Pa.
Frazier, J. M., Belton, Tex.
Fretz, A. E., Sellersville, Pa.
Freund, H. H., Philadelphia.
Friedenwald, J., Baltimore.
Fronefield, J. H., Media, Pa.
Fry, Samuel, Washington, D. C.
Fulton, D., South Bend, Ind.
Fuller, G. E., Monson, Mass.
Funk, D. S., Harrisburg, Pa.
Funnell, M. H., Philadelphia.
Futcher, T. B., Baltimore.
Gabriel, C. N., Baltimore.
Gagnon, A. L., Kankakee, Ill.
Gageby, Lenore H., New Castle, Pa.
Gage-Day, Mary, Kingston-on-Hudson, N. Y.
Gaius, Charles O., Hornellsville, N. Y.
Garcelon, Alonzo, Lewiston, Me.
Garrison, Daniel, Penns Grove, N. J.
Gardner, Edward E., Montrose, Pa.
Gault, W. E., Portsmouth, Ohio.
Geisler, Howard D., Philadelphia.
Gemmill, Harry C., Indianapolis.
Gerhard, Sam'l P., Philadelphia.
Gibbs, L. J., Chicopee, Mass.
Gichner, Joseph E., Baltimore.
Gifford, Henry B., Juda, Wis.
Gifford, John H., Fall River, Mass.
Gilbert, Samuel D., New Haven, Conn.
Gill, William T., Washington, D. C.
Gillette, Herbert F., Cuba, N. Y.
Gillette, Arthur A., Rome, N. Y.*
Glass, Jos. H., South Fork, Pa.
Goebel, Frederick R., English, Ind.
Goepp, R. Max, Philadelphia.
Goldthwait, Joel E., Boston.
Good, Wm. H., Philadelphia, Pa.
Good, J. F., New Cumberland, Pa.
Gordon, John A., Quincy, Mass.
Gordinier, Hermon C., Troy, N. Y.
Gow, Frank F., Schuylerville, N. Y.
Graham, W. H., Shreveport, La.
Grandy, Chas. R., Norfolk, Va.
Gray, Mason W., Pontiac, Mich.
Graybill, J. W., Newton, Kan.
Greene, Clark W., Binghamton, N. Y.
Green, Edgar M., Easton, Pa.
Greene, F. C., Chicago.
Green, Peyton, Wytheville, Va.
Greenwald, Dan'l F., Philadelphia.
Greenley, T. B., Meadow Lawn, Ky.
Griffin, Chas. H., Fair Haven, Vt.
Griggs, Elma C., Ithaca, N. Y.*
Grim, D. S., Reading, Pa.
Groff, John W., Harleysville, Pa.
Grosvenor, Joseph W., Buffalo.
Grove, W. T., Eureka, Kan.
Gullick, W. V., Oronoco, Minn.
Guilford, Wm. M., Lebanon, Pa.
Haecker, L. R., Hampton, Ia.
Hahn, E., Leetonia, O.
Haines, J. C., Vincentown, N. J.
Hall, E. N., Woodburn, Ky.
Hall, H. M., Jr., Pittsburg.
Hall, J. N., Denver.
Hall, W. E., Burlington, N. J.
Hall, W. J., Trenton, N. J.
Hallenbeck, O. J., Canandaigua, N. Y.*
Hamilton, W. T., Philadelphia.
Hammer, A. W., Philadelphia.
Hamburger, L. P., Baltimore.
Hamilton, J. E., Union, S. C.
Hammond, Wm., Glenolden, Pa.
Hammond, S. W., Rutland, Vt.
Hannum, Wm., Hatboro, Pa.
Hannum, J. W., Ludlow, Mass.
Happel, T. J., Trenton, Tenn.
Hare, H. A., Philadelphia.
Hartzell, W. H., Allentown, Pa.
Harrison, F. M., Napoleon, O.
Hartman, W. F., Swoope, Va.
Harvey, E. H., Atlantic City.
Hart, J. A., Colorado Springs, Colo.
Haskins, Mary G., Detroit.
Hatfield, C. J., Philadelphia.
Hatton, E. M., Columbus, O.
Hauser, C. D., Youngstown, O.
Hawley, J. E., Burr Oak, Kan.
Haselton, G. W., Haverhill, N. H.
Heacock, J. D., Birmingham, Ala.
Heffinan, S. P., Kittanning, Pa.
Heidner, G. A., West Bend, Wis.
Heller, H. D., Hellertown, Pa.
Henry, J. P., Jersey City.
Hertz, Wm. J., Allentown, Pa.
Herbst, H. H., Allentown, Pa.
Herst, H. E., McComb, O.
Heritage, C. S., Glassboro, N. J.
Hickman, H., Philadelphia.
Hickman, W. A., Atlantic City.
Higbee, W. S., Philadelphia.
Hildreth J. L., Cambridge, Mass.
Hills, A. K., New York.*
Hirsh, A. B., Philadelphia.
Hirst, L. B., Camden, N. J.
Hitzrot, C. H., Pittsburg.
Hoag, D. E., New York.*
Hobley, Thomas, Amherstburg, Ont., Canada.
Hoffmann, R., Baltimore.
Hogeboom, W. L., Troy, N. Y.
Holden, T. N., New York.
Holmes, A. M., Denver.
Holt, O. P., Cincinnati.
Holland, T. E., Hot Springs, Ark.
Holbert, J. F., Fairchance, Pa.
Holtzapple, G. E., York, Pa.
Hooper, W. H., Newport, Pa.
Hornbeck, J. S., Catasauqua, Pa.
Horsky, R., Helena, Mont.
Horne, J. A., Mauch Chunk, Pa.
Howe Wm. A., Phelps, N. Y.
Huddleston, J. H., New York.
Hughes, W. E., Philadelphia.
Hull, A. P., Montgomery Pa.
Hume, R. E., Frankfort, Ky.
Hume, J. E., Philadelphia.
Hunsberger, J. N., Skippack, Pa.
Iams, J. T., Waynesburg, Pa.
Illman, G. M., Philadelphia.
Irving, S. W., New Britain, Conn.
Isnard, W. H., Camden, N. J.
Jacobs, H. B., Baltimore.
Jack, C. M., Decatur, Ill.
Jackson, A. J., Matawan, N. J.
James, B. C., Kansas City, Mo.
Jameson, H., Indianapolis.
James, H. C., Mays Landing, N. J.
Jamesson, J. R., Apple Creek, O.
James, W. H., Pennsville, N. J.
Janeway, E. G., New York.
Jarrett, H. S., Towson, Md.
Jenkins, G. F., Keokuk, Ia.
Jepson, S. L., Wheeling, W. Va.
Jessop, Roland, York, Pa.
Johnson, O. B., Linton, Ind.
Johnston, J. I., Pittsburg.
Johnson, T. W. B., Pittsburg.
Johnson, F. S., Chicago.
Jones, H. H., York, Pa.
Jones, W. W., Allegheny, Pa.
Jones, Frank, Memphis, Tenn.
Jones, Allen A., Buffalo.
Joy, J. A., Atlantic City.
Jump, H. D., Philadelphia.
Karpeles, M. J., Philadelphia.
Kelly, Jos. V., Philadelphia.
Keller, J. C., Wind Gap, Pa.
Kempton, A. F., Philadelphia.
Kendall, H. R., Waterford, Pa.
Kinyoun, J. J., Glenolden, Pa.
King, John T., Baltimore.
Knight, A. L., Cincinnati.
Knox, W. F., McKeesport, Pa.
Kuebel, H., Kingston, Pa.
Kathan, D. R., Corinth, N. Y.
Kauffman, J. H., Reading, Pa.
Kehl, G. W., Reading, Pa.
Kelsey, R. W., Philadelphia.
Kelly, W. C., Morgantown, W
Keller, C. J., Baltimore.
Kemble, C. L., Bloomfield, Ia.
Kent, J. Bryden, Putnam, Conn.
Kenyon, Frank, Scipio, N. Y.
Kenyon, Paul, Wadena, Minn.

"Report on the Metabolism of a Case of Diabetes Mellitus," by Dr. Graham Lusk, New York City. Discussed by Drs. Vaughan, Hall and Lusk.

TUESDAY, JUNE 7—AFTERNOON.

"Regenerative Changes in Cirrhosis of the Liver," by Dr. W. G. MacCallum, Baltimore. Discussed by Drs. Loeb, Adler, Libman, McFarland, Eberling and MacCallum.

On motion Dr. W. S. Hall, Chicago, was allowed to read two papers (abstracted into the time limit of one): "The Relation of Chest Contour to Lung Capacity," by Dr. F. F. Malone, Chicago, and "Mathematical Relations of Chest Dimensions," by Dr. Hall.

On motion, the discussion of these two papers was dispensed with owing to the lateness of the hour.

"Notes on Vaccine," by Dr. Charles J. McClintock, Detroit. Discussed by Drs. Rosenau, Bergey, Ohlmacher and McClintock.

WEDNESDAY, JUNE 8.

"Uncinariasis in the South, with Special Reference to Mode of Infection," by Dr. Claude A. Smith, Atlanta, Ga. Discussed by Drs. Ward and Smith.

"The Nature and Significance of Leucocytosis," by Dr. A. Mansfield Holmes, Denver. Discussed by Drs. Christian and Holmes.

"Further Observations on Leucocytolysis," by Dr. Henry A. Christian and Dr. Thomas F. Leen, Boston. Read by Dr. Christian. Discussed by Drs. Bergey and Christian.

"Studies on Antistreptococcus Serum," by Dr. D. H. Bergey, Philadelphia.

"A Bacteriologic and Clinical Investigation of a Curative Serum for Typhoid Fever," by Dr. William Royal Stokes and Dr. John S. Fulton, Baltimore. Read by Dr. Stokes. Discussed by Drs. Yarbrough, Stokes and McFarland.

On motion of Dr. C. A. Smith, a Nominating Committee was appointed.

"Bone Cysts. A Consideration of the Benign and Adamantine Dentigerous Cysts of the Jaw, and Benign Cysts of the Long Pipe Bones" (with lantern slide demonstration), by Dr. Joseph C. Bloodgood, Baltimore. Discussed by Drs. Hall and Bloodgood.

"Note on Ascaris Texana: a Hitherto Undescribed Ascaris Parasitic in the Human Intestine," by Dr. Allen J. Smith, Philadelphia, and Dr. Richard A. Goeth, San Antonio, Tex. Read by Dr. Smith.

THURSDAY, JUNE 9.

"The Physiology of the Middle Ear," by Dr. J. Holinger, Chicago. Discussed by Dr. Hall.

"Anatomy of Bartholin's Glands; Cysts of Bartholin's Glands," by Dr. Thomas S. Cullen, Baltimore.

"Further Studies on Bacterial Intracellular Toxins," by Dr. Victor C. Vaughan, Ann Arbor. Discussed by Drs. Terrill, Clements, Howell, McNutt, Hall and Vaughan.

The Section passed a resolution of thanks to Dr. Vaughan and his department for the epoch-making work that he is doing.

In a discussion of the question whether the section favored the Association session next year on the Pacific coast, the Section directed its members in the House of Delegates that it left them uninstructed, and to use their own judgment.

"The Pelvic Urethral Sheath and Its Relation to the Extension of Carcinoma Cervicis Uteri," by Dr. John A. Sampson, Baltimore.

On motion of Dr. Stokes, Baltimore, it was resolved that members of the Section be permitted to consult with the General Secretary of the Association, and make arrangements for the publication of papers elsewhere, as well as in THE JOURNAL.

On motion of Dr. Rosenau, the Secretary was instructed to cast a ballot on nominations, presented by the Nominating Committee, which resulted in the election unanimously of Dr. Winfield S. Hall, Chicago, as Chairman; Dr. Henry A. Christian, Boston, as Secretary and Dr. Joseph McFarland, Philadelphia, as Delegate.

"The Passage of Different Foodstuffs from the Stomach," by Dr. W. B. Cannon, Boston. Discussed by Drs. Hall, Harrington, Bergey, Hough, Smith and Cannon.

"Extensive Thrombosis of the Sinuses of the Cerebral Dura, with a Report of Two Cases," by Dr. William G. Spiller, and Dr. C. D. Camp, Philadelphia. Read by Dr. Camp. Discussed by Drs. Welch and Libman.

Dr. E. E. Southard presented, in the time limit of one paper, "A Case of Diffuse Encephalitis Showing the Pneumococcus," by Dr. W. H. Ballard and Dr. F. R. Hume, and "A Case of Cortical Hemorrhage Following Scarlet Fever," by Dr. E. E. Southard and Dr. F. R. Hume, all of Boston.

"Borated Food as a Cause of Kidney Lesions," by Dr. Charles Harrington.

By courtesy of the Section, Dr. M. Miyashima, of the Imperial Japanese Institute for Investigation of Infectious Diseases, Tokio, Japan, read a brief paper on his work on the subject of malaria in Japan. In Japan he finds but one form of mosquito to exist, and but one form of malaria. In Formosa, on the other hand, there are several forms of mosquito of the anopheles group, and here more than one form of malaria is found. He presented drawings and photographs of some of these mosquitoes, and contributed the very important observation that of these mosquitoes there are some which can convey only one form of malaria, and not other forms of the disease. Beside this, he presented a method of preserving and staining cultures of bacteria in Petri dishes, which give very beautiful results. Dr. Miyashima's paper was discussed by Dr. Welch.

FRIDAY, JUNE 10.

"Malignant Endotracheal Tumor, Simulating Aneurism," by Dr. Judson Daland, and Dr. Joseph McFarland, Philadelphia. (As to its clinical aspects, by Dr. Daland, and as to its pathologic aspects, by Dr. McFarland, the latter using lantern slides in the presentation).

Dr. McFarland also gave a demonstration of a series of slides presented by Dr. John V. Shoemaker.

"The Influence of Posture on the Pulse Rate and Blood Pressure," by Dr. O. E. Stephens, Chicago. Read in abstract by Dr. Hall, Chicago. Discussed by Drs. Brainerd and Hall.

On motion of the Secretary, the Section voted to request the editor of THE JOURNAL to publish in THE JOURNAL and in the transactions the paper presented by Dr. Miyashima, on work done on malaria in the lymph institution, Department of Interior, Tokio, Japan, under the direction of Professor Kitasato.

On motion of the Secretary, the Section recommended for publication in THE JOURNAL and in the proceedings the paper entitled "The Mechanism of Streptococcus Infections," by Dr. G. F. Ruediger, Chicago, under a grant of the Association.

"Experiments Illustrating Physiologic Optics," by Dr. Winfield S. Hall. Discussed by Drs. Randall and Hall.

"Chylous (Milky) Ascites, with Eosinophilia, and an Analysis of Reported Cases," by Dr. L. Napoleon Boston, Philadelphia.

"A Case of Early Acute Pancreatitis, Without Hemorrhage," by Dr. H. H. Germain and Dr. Henry A. Christian, Boston. Read by Dr. Christian.

"The Pathologic Histology of Adipose Tissue," by Dr. Henry A. Christian. Discussed by Drs. McFarland and Boston.

As the outcome of research under a grant from the Association, Dr. C. W. Duval, Boston, read a paper, "Another Member of B. Dysenteriae Group." Discussed by Drs. Libman, Page, Christian and Duval.

ATLANTIC CITY REGISTRATION.

List of Members, Associate Members and Guests Who Registered at the Atlantic City Session.

The total registration at the Atlantic City Session was 2,880. As we have stated, this is the largest registration of any session in the Association's history. We print below the names and addresses of the members, associate members and guests who registered. The names that are starred are of associate members or guests. Preceding the names are two summaries: one giving the registration by states and one by sections. In the latter are mentioned "Miscellaneous, 65." This includes those who have not forwarded credentials for membership and those who did not sign their names distinctly, or who failed to fill out the card for publication. These are not counted in the summary by states.

REGISTRATION BY SECTIONS.

Practice of Medicine	[illegible]
Obstetrics and Diseases of Women	[illegible]
Surgery and Anatomy	730
Hygiene and Sanitary Science	64
Ophthalmology	281
Diseases of Children	109
Stomatology	38
Nervous and Mental Diseases	105
Cutaneous Medicine and Surgery	60
Laryngology and Otology	127
Materia Medica, Pharmacy and Therapeutics	53
Pathology and Physiology	46
Registered without specifying any particular section	111
Miscellaneous	65
Total	2,880

REGISTRATION BY STATES.

Alabama	18	Montana	7
Arkansas	30	Nebraska	14
Arizona	3	New Hampshire	10
California	42	New Jersey	231
Colorado	37	New Mexico	5
Connecticut	70	New York	352
Delaware	14	North Carolina	1
District of Columbia	55	North Dakota	6
Florida	5	Ohio	142
Georgia	19	Oklahoma	1
Idaho	1	Oregon	9
Illinois	150	Pennsylvania	846
Indian Territory	1	Rhode Island	19
Indiana	57	South Carolina	23
Iowa	36	South Dakota	8
Kansas	9	Tennessee	44
Kentucky	45	Texas	22
Louisiana	14	Utah	11
Maine	14	Vermont	19
Maryland	91	Virginia	41
Massachusetts	95	Washington	5
Michigan	60	West Virginia	24
Minnesota	31	Wisconsin	37
Mississippi	12	Wyoming	2
Missouri	38	Foreign	22

Section on Practice of Medicine.

Abernathy, Thomas E., Chattanooga, Tenn.
Acker, T. J., Croton-on-Hudson, N. Y.
Albee, E. S., Bellows Falls, Vt.
Alleman, H. M., Hanover, Pa.
Allen, J. S., Washington, D. C.
Allen, Luther M., Philadelphia.
Allen, Van. H. W., Springfield, Mass.
Allyn, Herman B., Philadelphia.
Alter, J. G., New Kensington, Pa.
Ander, Frank P., Carbon, Ia.
Ames, R. P. M., Springfield, Mass.
Amerland, J. H., St. Louis.
Anders, Howard S., Philadelphia.
Anders, J. M., Philadelphia.
Anderson, William E., Farmville, Va.
Angear, Benjamin H. S., Sublette, Ill.
Apple, S. S., Easton, Pa.
Appleton, Mary, New York.
Archer, William A., Houston, Tex.
Ash, H. St. Clair, Philadelphia.
Ashcraft, Samuel F., Mullica Hill, N. J.
Ashley, W. W., Ouray, Colo.

Ashton, Thos. G., Philadelphia.
Atwood, John W., Fishkill-on-Hudson, N. Y.
Babcock, Robert H., Chicago.
Bachmann, M. J., Easton, Pa.
Bailey, Saml., Mt. Ayr, Ia.
Baker, Eugene, Ithaca, N. Y.
Baker, F. Kline, Philadelphia.
Banning, Theresa, Syracuse, N. Y.*
Barber, T. L., Charleston, W. Va.
Barshinger, M. L., York, Pa.
Barrier, J. M., Delhi, La.
Barlow, W. Jarvis, Los Angeles.
Bass, Chas. C., Columbia, Miss.
Batton, John M., Downingtown, Pa.
Bauer, L. D., Philadelphia.
Beatty, H. M., Trenton, N. J.
Beck, J. S., Dayton, O.
Beckett, H. C., Scottsburg, Va.
Beetham, A. C., Bellaire, O.
Bell, John W., Minneapolis.
Bennet, W. H., Chicago.
Bennett, John W., Long Branch, N. J.
Bennett, W. H., Philadelphia.
Berner, David, Atlantic City.
Bernheim, Albert, Philadelphia.
Bernheim, Louis, Butte, Mont.
Berry, Edward S., Shippensburg, Pa.
Bettmann, H. W., Cincinnati.
Bierring W. L., Iowa City, Ia.
Bill, Benj. J., Genoa Junction, Wis.
Bill, C. H., Bridgeport, Conn.
Billings, Frank, Chicago.
Birney, H. H., Philadelphia.
Bishop, Louis F., New York.
Black, Wm. T., Memphis, Tenn.
Blackburn, A. B. Philadelphia.
Blankenhorn, H., Orrville, O.
Blundell, Wm., Paterson, N. J.
Bodine, J. M., Louisville.
Bolin, Jesse A., Philadelphia.
Bonnet, A. O., Columbus, O.
Bonney, S. G., Denver, Colo.
Bonham, Jas. M., Hobart, O. T.
Bowman, H. C., Mahanoy City, Pa.
Bowditch, V. Y., Boston.
Boyce, D. C., Allegheny, Pa.
Bradshaw, L. L., New York.*
Brannan, John W., New York.
Brattain, G. H., Paulding, O.
Brayton, C. E., Stonington, Conn.
Breuer, E. J., Shabbona, Ill.
Brodbeck, John R., Codorus, Pa.
Broidrick, Jas. P., Boston.
Brobeck, A. L., Hoopeston, Ill
Brooke, Roger, Sandy Springs, Md.
Brown, Lawrason, Saranac Lake, N. Y.
Brown, Ellen H., Chester, Pa.
Brown, Otis S., Warren, Pa.
Browning, C. C., Highland, Cal.
Broylen, Chas. J. Johnson City, Tenn.
Brunning, F., Cincinnati.
Buermann, W., Newark, N. J.
Burke, Joseph J., Philadelphia.
Burnham, Clark James, San Francisco.
Burnham, M. P., Gaffney, S. C.
Burroughs, James A., Asheville, N. C.
Burroughs, H. S., Pittsburg.
Bushey, S. G., Camden, N. J.
Butterworth, W. W., New Orleans, La.
Byrne, Patrick J., New York.
Cabot, R. C., Boston.
Cahall, W. C., Germantown, Pa.
Cameron, G. A., Germantown, Philadelphia.
Campbell, A. D., Cleveland.
Campbell, C. L., Sheradanville, Pa.
Campbell, D., Butte, Mont.
Campbell, E. R., Bellows Falls, Vt.
Carmichael, J. W., Knoxville, Tenn.
Carpenter, A. B., Boonton, N. J.
Carroll, J. R., Hatboro, Pa.
Carson, S. C., Greensboro, Ala.
Castleman, H. L., Sylacauga, Ala.
Cathell D. W., Baltimore.
Caywood, J. E., Piqua, O.
Champlin, John, Westerly, R. I.
Chestnut, J. C., Philadelphia.
Chew, E. C., Atlantic City.
Chipman, J. C., Sterling, Colo.
Christopher, W. H., London, O.
Clark, C. E., Youngstown, O.
Clark Robt. C., Pittsburg.
Clark, Wm. A., Trenton, N. J.
Cobleigh, E. A., Chattanooga.
Cox, John W., New York.
Coffman, John J., Scotland, Pa.
Coleman, H. R., Columbus, O.
Coleman, T. D., Augusta, Ga.
Collins, C. R., Crisfield, Md.
Condon, A. S., Ogden, Utah.
Congdon, W. O., Cuba, N. Y.
Connor, G. L., Detroit.
Cooper, C. B., Honolulu, Hawaii.
Cooper, J. C., Philadelphia.
Cordell, E. F., Baltimore.
Corl, H. R., Middlebranch, O.
Cornell, I. M., Wappingers Falls, N. Y.*
Corson, Susan B., Lansdowne, Pa.
Coss, Frederic, Kingston, Pa.
Councilman, W. T., Boston.
Cox, James A., Morgantown, W. Va.
Craig, J. M., New York.
Craig, Frank A., Philadelphia.
Crawford, Jas. R., Philadelphia.
Crowitz, J. A., Newtown, Pa.
Culkins, J. R., Rochester, N. J.
Cummins, G. W., Belvidere, N. J.
Cunningham, T. M., Marquette, Mich.
Curtin, R. G., Philadelphia.
Curtiss, R. M., Marengo, Ill.
Cutler, Elbridge G., Boston.
Daggett, Wm. G., New Haven, Conn.
Daland, Judson, Philadelphia.
Danforth, I. N., Chicago.
Dare, Geo. S., Rising Sun, Md.
Davis, H. K., East Orange, N. J.
Davis, Jeff., Toccoa, Ga.
Davis, N. S., Jr., Chicago.
Davis, T. D., Pittsburg.
Davis, Theo. G., Bridgeton, N. J.
Davis, W. A., Camden, N. J.
Davis, Wm. H. K., East Orange, N. J.
Davis, Wm., St. Paul.
Day, O. R., Strasburg, Pa.
Delaney, W. R., Shade Run, Pa.
Denison, Ellery, New York.
Dercum, Clara T., Philadelphia.
De Silver, J. F., Atlantic City.
Dewey, H. W., Tacoma, Wash.
Dibrell, E. R., Little Rock, Ark.
Dice, Seth D., Xenia, O.
Dickes, J. T., Portland, Ind.
Dickson, W. R., McDonald, Pa.
Diverty, H. B., Woodbury, N. J.
Divine, Allen, Ellenville, N. Y.
Dock, George, Ann Arbor, Mich.
Dodin, Henry A., New York.
Donaldson, J. B., Canonsburg, Pa.
Doty, E. A., Oxford, Ia.
Dotterer, C. B., Zieglerville, Pa.
Douglas, W. E., Middletown, N. Y.
Dougherty, M. M., Mechanicsburg, Pa.
Drechsler, William, Denver.
Drennen, C. T., Hot Springs, Ark.
Drips, J. H., Philadelphia.
Drummond, W., Philadelphia.
Dubbs, J. H., Philadelphia.
Dunmire, G. B., Philadelphia.
Eastman, H. A., Jamestown, N. Y.
Eastman, R. D., Berkshire, N. Y.
Eberle, J. G., Ft. Smith, Ark.
Eby, Jas. B., Newport, Pa.
Eckert, J. W., Temple, Pa.
Ertman, P. N., Philadelphia.
Edson, C. E., Denver.
Edsall, D. L., Philadelphia.
Einhorn, Max, New York.
Eisenberg, J. L., Norristown, Pa.
Ellenberger, J. W., Harrisburg, Pa.
Ellinwood, A G., Attica, N. Y.
Ellis, Alter G., Philadelphia.
Elmer, William, Trenton, N. J.
Elmer, H. L., Syracuse, N. Y.*
Elwell, Alfred M., Camden, N. J.
Ely, Wm. S., Rochester, N. Y.*
Emmerling, Karl, Pittsburg.
English, D. E., Millburn, N. J.
Erdman, Wm. B., Macungie, Pa.
Erdman, Wm. T., Buckingham, Pa.
Erwin, R. W., Bay City, Mich.
Evans, D. W., Scranton, Pa.
Ewing, W. B., West Grove, Pa.
Eyestone, A. G., Gibsonburg, O.
Faries, C. T., Narberth, Pa.
Farquhar, Chas., Olney, Md.
Fassett C. W., St. Joseph, Mo.
Fehlen, A., San Francisco.
Ferguson, R. W., Somerville, N. J.
Ferguson, F., New York.
Ferguson, Wm. N., Philadelphia.
Fish, C. M., Pleasantville, N. J.
Fish, Samuel A., Denver.
Fisher, T. C., Sussex, N. J.
Fisher, H. G., Clear Creek, Utah.
Fisler, C. F., Clayton, N. J.
Fitch, T. S. P., East Orange, N. J.
Fitch, A. B., Factoryville, Pa.
Fitz, Reginald H., Boston.
Fitzgerald, D. J., Glens Falls, N. Y.
Flechtenstine, Horace, Newportville, Pa.
Fleisher, Rebecca, Philadelphia.
Fleming, J. C., Lambert, Ind.
Fleming, W. J., Philadelphia.
Floyd, J. C. M., Steubenville, O.
Flynn, E. H., Marquette, Mich.
Forman, L. R., Buckhannon, W. Va.
Foster, W. R., Grafton, Pa.
Foster, W. B., Pittsburg.
Foshay, P. M., Chicago.
Fountain, J. H., Chapin, Ill.
Foster, J. P. C., New Haven, Conn.
Fox, C. J., Willimantic, Conn.
Francine, Albert P., Philadelphia.
Frank, G. S., Millheim, Pa.
Frazier, J. M., Belton, Tex.
Fretz, A. B., Sellersville, Pa.
Freund, H. H., Philadelphia.
Friedenwald, J., Baltimore.
Fronfield, J. S., Media, Pa.
Fry, Samuel, Washington, D. C.
Fulton, D., South Bend, Ind.
Fuller, G. R., Monson, Mass.
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Malone, F. F., Chicago.*
Newcomet, Wm. S., Philadelphia.
Ohlmacher, A. P., Gallipolis, O.
Page, Calvin G., Boston.
Park, William H., New York.
Hosenau, M. J., Washington, D. C.
Rosenberger, Randle C., Philadelphia.
Schoney, L., New York.*
Smith, Allen J., Philadelphia.
Smith, Claude A., Atlanta, Ga.
Stephens, O. Z., Chicago.*
Stokes, Wm. R., Baltimore.
Terrill, James J., Galveston, Tex.
Ulrich, W. B., Chester, Pa.
Vaughan, Victor C., Ann Arbor, Mich.
Ward, Henry B., Lincoln, Neb.*
Welch, William H., Baltimore.
White, C. G., Philadelphia.
Whitney, E. L., Baltimore.
Williams, Roger, Pittsburg.
Wynn, Frank B., Indianapolis.

The following did not specify any particular section:

Abbott, J. T., Ovid, Mich.
Adams, O. H., Vineland, N. J.
Alguire, Annie, Belvidere, Ill.
Alguire, Alden, Belvidere, Ill.
Allis, Oscar H., Philadelphia.
Arthur, F. M., Pittsford, Vt.
Ashton, W. E., Philadelphia.
Bailey, W. G., Camden, N. J.
Barkey, Peter, Erie, Pa.
Barnhill, James U., Columbus, O.
Brouner, Walter B., New York.
Burnett, C. D., Newark, N. J.
Burch, W. Thompson, Washington, D. C.
Burns, R. Bruce, Philadelphia.
Cole, W. W., Allegheny, Pa.
Coplin, W. M. L., Philadelphia.
Crane, S. E., Syracuse, N. Y.*
Crankshaw, C. W., Newark, N. J.
Crumb, Chas. W., Utica, N. Y.*
Crummer, LeRoy, Omaha, Neb.
Currens, J. R., Two Rivers, Wis.
Currie, T. R., Philadelphia.
Cuskaden, A. D., Atlantic City, N. J.
Deaver, R. W., Germantown, Pa.
Dougherty, Henrietta M., Philadelphia.

Dix, J. Morgan, Cape May C. H., N. J.
Dundor, Adam R., Reading, Pa.
Dunmead, M. A., Ithaca, N. Y.
Dunlap, H. M., Battle Creek, Mich.
Dunlap, Mary J., Vineland, N. J.
Earle, S. T., Jr., Baltimore.
Ellis, C. M., Elkton, Md.
Elliott, J. H., Gravenhurst, Ont., Canada.*
Exton, J. A., Arlington, N. J.
Feltz, J. Clinton, Philadelphia.
Franklin, M. M., Philadelphia.
Frauenthal, H. C., New York.*
Frauenthal, H. W., New York.
Garner, H. B., Traverse City, Mich.
Geier, G. N., Rochester, N. Y.
Gottschalk, L., Chester, Pa.
Grant, J. G., Akron, O.
Gray, F. D., Jersey City.
Gutshall, Frank A., Blair, Pa.
Harvey, Edwin B., Boston.
Hemmeter, John C., Baltimore.
Hogan, R. F., Brooklyn, N. Y.*
Hoppe, G. J., Ft. McDowell, Cal.
Hollinger, J., Chicago.
Hoover, A. M., Parkers Landing, Pa.
Hosmer, A. J., Salt Lake City.
Howard, E. C., Philadelphia.
Jarecky, H., New York.
Johnson, W. R., Paterson, N. J.
Jones E. C., Rochester, N. Y.
Jenkins, D. M., Fullerton, Neb.
Kelchner, W. I., Camden, N. J.
Kirker, G. A., Detroit.
Kohler, J. R., New Holland, Pa.
Kuehn, R., Riesfelds, Nicaragua.*
Kyle, Jas. J., Indianapolis.
Leech, F., Washington, D. C.
Leonard, J. E., Harford Mills, N. Y.
Lombard, Guy D., New York.
Long, J. W., Greensboro, N. C.
Lucas, V. C., Cleveland.
McKay, J. K., Potsdam, N. Y.
Mason, L. D., Brooklyn, N. Y.
Meterhof, Mrs. Lee, New York.*
Metzler, V. W., Atlantic City.
Minnich, W. H., Dallastown, Pa.
Medell, Daniel A., Philadelphia.
Meham, C. C., San Francisco.
Montgomery, L. H., Chicago.
Morgan, James S., Augusta, Ga.
Mudgett, John H., Philadelphia.
Murray, D. H., Syracuse, N. Y.*
Norville, Francis A., Meredosia, Ill.
Nichols, Estes, Portland, Me.
Palmer, Edmund J., New York.
Peckham, F. E., Providence, R. I.
McPhedran, A., Toronto, Can.*
Putney, Jas., Charleston, W. Va.
Quackenbush, L. H., Broome, N. Y.
Ramsay, Wm. E., Perth Amboy, N. J.
Raudenbush, A. G., Reading, Pa.
Reed, E. L., Atlantic City.
Reynolds, J. H., Bellevue, Pa.
Richmond, M. G., Fredonia, N. Y.*
Rodham, T. B., Scranton, Pa.
Rogers, C. A., Freeport, Pa.
Rositos, G. L., Lambertville, N. J.
Roy, Dunbar, Atlanta, Ga.
Russell, E. H., Charlotte, N. C.
Ryan, D. M., Ware, Mass.
Saxman, N. H., Philadelphia.
Schachner, A., Louisville.
Simmons, Horace M., Baltimore.
Schmitt, Gustav, Milwaukee.
Stern, A. A., Beadout, N. Y.*
Stotts, A. F., Shrewsbury, Pa.
Thomasson, F. G., Kissimmee, Fla.
Underwood, Adelaide M., Lancaster, Pa.
Salisgor, Julius.
Webster, J. B., Atlantic City.
Wedgwood, M. C., Princeton, Me.
Wharton, H. R., Philadelphia.
Whitmyer, John F., New York.*
Wilhelm, E. T., South Bethlehem, Pa.
Young, Charles, Newark, N. J.

Marriages.

ALEXANDER FREED, M.D., to Miss Lucille Delevic, at Baltimore, June 22.

C. H. BANKHEAD, M.D., to Miss Maude Harding, at Elkins, W. Va., June 16.

WILMER CLIFTON ENSOR, M.D., to Miss Mary Virginia Stromberg, at Texas, Md.

ROBERT PARK GRIFFITH, M.D., to Miss Julia Walton, at Richmond, Va., June 22.

CHARLES W. HARTWIG, M.D., to Miss Ida M. Alvey, both of Baltimore, June 11.

D. T. QUIGLEY, M.D., to Miss Helen Seyforth, both of North Platte, Neb., June 15.

CHARLES R. KOSSAY, M.D., to Miss Ollie Roloff, both of Milwaukee, Wis., June 8.

GEORGE B. BILSBORROW, M.D., to Miss Nette F. Conover, both of Yuma, Colo., June 15.

THOMAS M. HARRIS, M.D., to Miss Mary Lasaiter, both of Mustang, Texas, June 8.

S. L. STEVENS, M.D., to Miss Vida E. Uppendahl, both of Dalton City, Ill., May 16.

WILLIAM H. MICK, M.D., Denver, Colo., to Miss Ethel T. Wead of Omaha, May 25.

D. G. BODKIN, M.D., to Miss Madelaine Fisher, both of Brooklyn, N. Y., June 14.

HUGH A. BEAM, M.D., Eagle Grove, Iowa, to Miss Grace M. Brown of Rolfe, Iowa, June 8.

ION JACKSON, M.D., New York City, to Miss Florence Slater of Middletown, N. Y., June 15.

JAMES S. HANSON, M.D., Sandusky, Ohio, to Miss Bessie E. Arnold of Avery, Ohio, June 15.

E. JAY CLEMENS, M.D., Aberdeen, S. D., to Miss Katherine Welles of Meadville, Pa., June 15.

THOMAS H. LEONARD, M.D., Chicago, to Miss Caroline M. Gehlbach of Lincoln, Ill., June 21.

FRANK HILL HEDGES, M.D., Frederick, Md., to Miss Mary Simpson Mullinix, at Urbana, Md.

JOHN FLOYD HOLT, M.D., Pittsburg, Pa., to Miss Estelle Spear of Parker's Landing, June 15.

PAUL WASHINGTON BUCKHAM, M.D., to Miss Maude Bohr Hamner, at Covesville, Va., June 11.

JOSEPH MARTIN HITCH, M.D., Laurel, Del., to Miss Llewellyn Kerr Freeny, at Suffold, Va., June 22.

BRANDRETH SYMONDS, M.D., New York City, to Miss Florence Bacon of Goshen, N. Y., June 11.

WILLIAM H. RYLAND, M.D., Meyersdale, Pa., to Miss Mary Schuyler of Lonsdeoing, Md., June 11.

RAYMOND P. FRINK, M.D., Wagner, S. D., to Miss Daisy Belle Safley of Archer, Iowa, June 15.

ARTHUR WISE DEBELL, M.D., Powellton, W. Va., to Elizabeth Fairfax, at Richmond, Va., June 29.

J. NELSON BARNES, M.D., Darlington, Mo., to Miss Ruby Pearl Cravens, at St. Joseph, Mo., April 20.

LOUIS W. CULBREATH, M.D., Stanton, Tenn., to Miss Willie Thomas Capelli of Van Buren, Ark., June 15.

Deaths.

Asbury McKendree Crew, M.D. Bellevue Hospital Medical College, New York City, 1865, a member of the American Medical Association, three times city physician of Kansas City, Mo., a member of the county and state societies, and for 35 years a leading member of the local medical profession, died at his home in Kansas City, June 23, from Bright's disease, with associated hepatic disease, after a prolonged illness, aged 63.

Vincent H. Moore, M.D. Faculty of Medicine of Queen's University, Kingston, Ont., 1876, past president of the Canadian Medical Association; representative of his college on the Ontario Medical Council for many years, and its president in 1899, and vice-president of the Association of Military Medical Officers of Canada, died suddenly at his home in Brockville, June 6, aged 56.

James W. Keiser, M.D. Department of Medicine of the University of Pennsylvania, Philadelphia, 1882, of Reading, Pa., a member of the Reading and Berks County medical societies, and for fourteen years secretary and in 1901 president of the latter, died at the Reading Hospital, June 8, from valvular heart disease, after an illness of one week, aged 43.

Lafayette J. Jones, M.D. Jefferson Medical College, Philadelphia, 1861, surgeon in the Confederate Service, and in charge of the Winder Hospital, Richmond, Va., during the Civil War; chief surgeon of the Confederate Soldiers' Home, Pewee Valley, Ky., died at his home in Franklin, Ky., from organic heart disease, June 11, aged 66.

James Hocking, M.D. University of Michigan Department of Medicine and Surgery, Ann Arbor, 1891, physician of the Wolverine, Allouez and Mohawk mines, and secretary of the Houghton County Medical Society, died at his home in Wolverine, Mich., June 9, from fracture of the skull, received in a runaway accident, aged 36.

William S. Horsford, M.D. Department of Medicine of the University of Pennsylvania, Philadelphia, 1877, formerly assistant secretary to the State Board of Health, and city physician of San Francisco, was found dead at his home in that city, June 13, from heart disease and alcoholism, aged 52.

George L. Fitch, M.D. Bellevue Hospital Medical College, New York City, 1870, of San Francisco, for five years crown physician of Hawaii, who passed on all cases of leprosy in Honolulu for five years, died at the Belmont Sanitarium, in San Mateo County, Cal., June 2, aged 60.

Michael J. Hughes, M.D. Jefferson Medical College, Philadelphia, 1883, port physician and ex-officio member of the board of health of Wilmington, Del., died at Bedford Springs, Pa., June 19, from Bright's disease, from which he had suffered several years.

Thomas Flint, M.D. Jefferson Medical College, Philadelphia, 1849, a member of the American Medical Association, and one of the most prominent citizens of San Benito County, Cal., died at his home near San Juan, Cal., June 19, from paralysis, after an illness of five days.

James T. Crow, M.D. Medical Department of the St. Louis University, 1854, a member of the American Medical Association; for more than 40 years an esteemed practitioner of Carrollton, Ill., died at the Illinois Central Hospital for the Insane, June 1, aged 77.

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Edward Gumpert, M.D. University of Würzburg, Germany, 1866, one of the oldest physicians of Wilkesbarre, Pa., died at his home in that city, June 3, from paralysis, aged 78. During the Civil War he served on the staff of General McClellan.

John Walter Bethea, M.D., a member of the American Medical Association, and of the Mississippi State Medical Association, was instantly killed, June 18, by a train, while driving over a grade crossing at his home in Fernwood, Miss.

William Hayte Haddock, M.D. College of Physicians and Surgeons of Baltimore, 1896, for several years physician of Duval County, Fla., died at his home in Jacksonville, June 15, from typhoid fever, after an illness of one month, aged 31.

John Walter Hunt, M.D. Kentucky School of Medicine, Louisville, 1879, died recently at his home in Anderson, Ind., and was buried, June 20. His funeral was attended by the Madison County Medical Society in a body.

William D. Spencer, M.D. College of Physicians and Surgeons in the City of New York, 1873, a member of the American Medical Association and the Connecticut Medical Society, died at his home in Old Saybrook, Conn., June 3.

Cédric Le Moine Cotton, M.D. McGill University, Montreal, 1870, of Cowansville, Quebec, died in the Montreal General Hospital, June 16, from septicemia following an operation wound, after an illness of ten days, aged 47.

George A. Geist, M.D. University of Michigan, Ann Arbor, 1897, of Prairie du Chien, Wis., died from cerebral hemorrhage following an overdose of morphin taken with suicidal intent, at McGregor, Iowa, June 16, aged 30.

Matthew Leepers, M.D., major-surgeon, U. S. V., formerly of Chicago; for the last year and a half president of the board of health of the island of Mindoro, P. I., died from nephritis, in Glen Cove, L. I., June 4, aged 50.

Silas N. Denham, M.D. St. Louis Medical College, 1860, a surgeon in the Confederate Army during the Civil War, died at his home in Kansas City, Mo., June 9, from nephritis, after an illness of two weeks, aged 66.

James Lawless, M.D. Rush Medical College, Chicago, 1877, some-time assistant superintendent of the Cook County Hospital for the Insane, died suddenly at his home in Chicago, June 5, from heart disease, aged 60.

Xavier D. Clark, M.D. Vanderbilt University Medical Department, Nashville, 1886, of Nocona, Texas, died at a sanitarium in Gainesville, Texas, June 16, two days after an operation for cancer of the liver.

Phillip W. Beale, M.D. Jefferson Medical College, Philadelphia, 1876, coroner of Camden County, N. J., died at his home in Camden, June 7, after an illness of five days from cerebral hemorrhage, aged 47.

Walter Scott McCall, Jr., M.D., Missouri Medical College, St. Louis, 1882, of Steedman, Mo., died at the home of his parents in Fulton, Mo., from chronic malaria, after an illness of five years, aged 46.

Frank P. Collins, M.D. Michigan College of Medicine and Surgery, Detroit, of Detroit, died at the Detroit Sanitarium, June 2, from consumption after an illness of four months, aged 31.

Gaspard Archambault, M.D. University of the Victoria College, Cobourg, Ont., 1873, formerly professor of dermatology at Laval University, died at his home in Montreal, June 14, aged 53.

Finis Brandon, M.D. Vanderbilt University Medical Department, Nashville, Tenn., 1879, died at his home in Lafayette, Ky., June 8, from gastritis, after an illness of one year, aged 48.

John Hardin Dorn, M.D. Albany (N. Y.) Medical College, 1864, for 21 years police surgeon in New York City, died suddenly from angina pectoris in London, England, June 17, aged 62.

William T. Ducreux, M.D. American Medical College, Indianapolis, 1899, died at his home in Bethlehem, Ind., June 12, from acute gastritis, after an illness of only a few hours, aged 50.

Wilbur R. McKnew, M.D. University of Maryland, Baltimore, 1862, surgeon in the Confederate service during the Civil War, died at his home in Baltimore, May 31, after a lingering illness, aged 64.

Andrew J. Morgan, M.D. Cincinnati College of Medicine and Surgery, 1890, formerly city physician of Chattanooga, Tenn., died at Antelope, Texas, May 25, after a prolonged illness, aged 50.

John A. Brenneman, M.D. Rush Medical College, Chicago, for many years in practice at Freeport, Ill., died at his home in Riverside, Cal., May 22, from heart disease, after a brief illness, aged 73.

Gus Ray Summers, M.D. Medical College of Indiana, Indianapolis, 1897, ex-president of the Henry County Medical Society, died at his home in Middletown, Ind., June 8, from pneumonia, aged 29.

Swan W. Carlson, M.D. University of Minnesota College of Medicine and Surgery, Minneapolis, 1902, of Starbuck, Minn., died at Bethesda Hospital, St. Paul, June 3, from consumption, aged 30.

Frank Frosstro, M.D. College of Physicians and Surgeons, Keokuk, Iowa, 1882, died at his home in Chester, Iowa, June 16, from the effects of carbolic acid accidentally self-administered.

Michael D. Scanlon, M.D. Jefferson Medical College, Philadelphia, 1869, formerly of Washington, Ind., died at the Home of the Little Sisters of the Poor, Evansville, Ind., May 30, aged 73.

Samuel T. Dunning, M.D. Vanderbilt University Medical Department, Nashville, 1887, died from cerebral hemorrhage, June 20, at his home in Canton, Miss., after an illness of three hours.

Alvin J. Howe, M.D. Medical College of the Pacific, San Francisco, 1873, died at his home in Alameda, Cal., June 12, from Bright's disease, after an illness of several years, aged 55.

Hugh McD. Martin, M.D. University of Virginia Medical Department, Charlottesville, 1855, surgeon in the Confederate service, died at his home in Fredericksburg, Va., June 23.

Robert Elmer Bunker, M.D. University of California Medical Department, San Francisco, 1869, was found dead from heart disease in his office in San Francisco, June 12, aged 42.

Henry R. Childs, M.D. Harvard University Medical School, Boston, died at his home in East Hartford, Conn., June 14, from Bright's disease, after a prolonged illness, aged 59.

Stafford J. Mook, M.D. University of Michigan Department of Medicine and Surgery, Ann Arbor, 1882, died at his home in Winsted, Minn., June 17, from pneumonia, aged 64.

Charles J. Knoeland, M.D. University of Pennsylvania, Philadelphia, 1870, of Traverse City, Mich., died at the Alma Sanitarium, June 4, from organic heart disease, aged 66.

Elias J. Van Court, M.D. Department of Medicine of the University of Pennsylvania, Philadelphia, 1853, died, June 4, at his plantation home near Kingston, Miss., aged 73.

Alden A. Andrews, M.D. University of Michigan, Ann Arbor, 1877, died at his home in Fargo, N. D., June 12, after an illness of several months, from Bright's disease, aged 50.

Emmet E. Bracey, M.D. Michigan College of Medicine and Surgery, Detroit, 1882, of Thompsonville, Mich., died, June 18, in Grand Rapids, Mich., after a protracted illness.

William H. Coe, M.D. Department of Medicine of the University of Pennsylvania, Philadelphia, 1866, died at his home in Auburn, N. Y., recently, and was buried May 28.

George Washington Brooks, M.D. New York University, 1860, who retired from active practice in 1896, died at his home in New York City, June 3, from apoplexy, aged 67.

John H. Hudson, M.D. Illinois, 1890, mayor of Negaunee, Mich., was drowned in the Escanaba River while on a fishing expedition. His body was recovered June 6.

R. T. Elliott, M.D. Medical College of Virginia, Richmond, 1862, surgeon in the Confederate service during the Civil War, died at his home in Christiansburg, Va., May 27.

William Herbert Brinker, M.D. Barnes Medical College, St. Louis, 1901, of Satan, Mo., was run over by a train near that place, June 12, and instantly killed, aged 27.

John H. Creekbaum, M.D. Miami Medical College, Cincinnati, formerly of Denver, died from pneumonia at the Holy Cross Hospital, Salt Lake City, June 6, aged 25.

Joseph William Akin, M.D. Louisville Medical College, surgeon in the Confederate service during the Civil War, died at his home in Louisville, June 20, aged 74.

John Ballard, M.D. Jefferson Medical College, Philadelphia, 1866, died at his home in Haubstadt, Ind., June 12, from paralysis, after a lingering illness, aged 64.

E. W. Parkins, M.D., a young practitioner of Bramwell, W. Va., was thrown from his buggy in a runaway, June 18, fracturing his skull. He died June 20.

Daniel W. Moseley, M.D. Jefferson Medical College, Philadelphia, died at his home in Richmond, Va., June 15, from apoplexy, after a short illness, aged 76.

David Williams, M.D. Jefferson Medical College, Philadelphia, 1891, died at his home in Slatington, Pa., June 1, from consumption, after a long illness, aged 42.

Henry D. Donaut, M.D. Faculty of Medicine of Queen's University, Kingston, Ont., 1892, died of pneumonia at his home in Walkerton, Ind., June 7, aged 37.

Robert Fitzgerald Gillis, M.D. New York University, New York City, 1879, died at his home in East Orange, N. J., May 28, after a long and painful illness.

Oliver E. E. Arndt, M.D. University of Michigan, Ann Arbor, 1867, died at his home in Easton, Pa., June 1, from intermittent fever, after a brief illness, aged 41.

Caleb Edward Iddings, M.D., surgeon in the U. S. Army during the Civil War, died at his home in Sandy Spring, Md., June 4, from Bright's disease, aged 75.

Joseph Haven, M.D. Rush Medical College, Chicago, 1890, of Chicago, United States consul at St. Kitts, British West Indies, died at his post of duty, June 10.

Robert M. Merryman, M.D. Columbus (Ohio) Medical College, 1891, died at his home in Dublin, Ohio, after a lingering illness from lung disease, June 2.

Charles S. Ramsdle, M.D. Starling Medical College, Columbus, 1871, a charter member of the Vinton County Medical Society, of Zaleski, Ohio, died recently.

Waterman F. Covey, M.D. Howard University Medical Department, Washington, D. C., 1880, died at his home in Washington, D. C., June 16, aged 70.

Washington Pithian, M.D. Medical College of Ohio, Cincinnati, 1848, the oldest practitioner of Bourbon County, Ky., died at his home in Paris, June 16.

L. E. Hutchinson, M.D. Illinois, 1877, died at his home in Marinette, Wis., June 8, from cerebral hemorrhage complicating pneumonia, aged 54.

Benjamin Franklin Lang, M.D. Ohio, 1882, died at his home in Pawtucket, R. I., June 8, from diphtheria, after an illness of one week, aged 48.

Lucius Smith Ingman, M.D. Ohio, 1868, died at his home in Oak Park, Ill., June 3, from Bright's disease, after an illness of six months, aged 66.

Joseph Lewis Fant, M.D. Medical College of the State of South Carolina, Charleston, 1876, died at his home in Tuscaloosa, Ala., May 30.

William Joseph Simpson, M.D. Kansas City (Mo.) Medical College, 1892, of Weston, Mo., was shot and instantly killed, June 3, aged 50.

Henry I. Hummel, M.D. Starling Medical College, Columbus, 1865, died at his home in Baltimore, Ohio, June 11, after a short illness, aged 66.

William L. Williamson, M.D. University of Maryland School of Medicine, Baltimore, 1869, died at his home in Marianna, Ark., May 29.

George W. Burke, M.D. Medical Institution of Yale College, New Haven, 1843, died at his home in Middletown, Conn., June 4, aged 82.

Henry B. Bosse, M.D. University of Michigan, Ann Arbor, 1873, died recently from septicemia at his home in Forbestown, Cal.

Jacob Hahn Beidler, M.D. Illinois, died at his home in Lincoln, Ill., June 6, from bronchitis, after an illness of four weeks, aged 75.

C. E. B. Findley, M.D. Medico-Chirurgical College of Philadelphia, 1888, died at his home in Easton, Pa., May 31, aged 41.

Elizabeth Young Taylor, M.D. Ohio, 1893, died recently at her home in Grand Rapids, Mich., and was buried, June 4.

Thomas P. Leedom, M.D. Keokuk (Iowa) Medical College, 1903, died suddenly at his home in Kirksville, Mo., June 4.

Fabius Haywood Seawell, M.D., surgeon in the Confederate service, died at his home in Emit, N. C., May 30, aged 63.

I. W. Cousins, M.D. Atlanta (Ga.) Medical College, 1880, died at his home in Jonesboro, Ga., June 9, aged 60.

Samuel P. Town, M.D. Ohio, 1871, died at his home in Jackson, Mich., June 1, from paralysis, aged 82.

William M. Davis, M.D., died at his home in Mullins, S. C., June 17, after a short illness, aged 73.

John Henry Fiste, M.D. Pennsylvania, 1837, died at his home in Oakland, Cal., June 10, aged 90.

W. H. Bentley, M.D. Kentucky, 1866, died at his home in Woodstock, Ky., May 12.

A. L. W. Bowers, M.D., 1842, died recently at his home in Winfield, Ohio, aged 80.

W. Andrew Cook, M.D., 1879, died at his home in Denver, Colo., June 12, aged 58.

Noah Bergman, M.D. Illinois, 1892, died at Mount Corey, Ohio, June 6, aged 57.

Reuben Owen, M.D. Pennsylvania, 1875, died at his home in Philadelphia, June 9.

James Austin, M.D., died at his home in Owosso, Mich., June 3, aged 70.

The Public Service.

Army Changes.

Memorandum of changes of station and duties of medical officers, U. S. Army, for the two weeks ending June 25, 1904:

Vose, William H., asst.-surgeon, leave of absence granted for two months and twenty-three days is revoked.

Gilchrist, Harry L., asst.-surgeon, granted ten days' leave about June 20, 1904.

Havard, Valery, asst.-surgeon-general, relieved from duty at U. S. Military Academy, West Point, N. Y., and ordered to proceed Sept. 1, 1904, to Governor's Island, N. Y., and report to commanding general, Department of the East, for duty as chief surgeon of that department.

Rand, I. W., asst.-surgeon, granted twenty days' leave of absence.

Murray, Alexander, asst.-surgeon, reported for duty U. S. General Hospital, Fort Bayard, N. M.

Owen, Wm. O., surgeon, and Geer, Chas. C., asst.-surgeon, arrived at San Francisco from Manila on the *Logan*, sick.

Morse, Arthur W., asst.-surgeon, left Vancouver Barracks, Wash., with troops en route to American Lake, Wash.

Ewing, Charles, surgeon, left Columbus Barracks, Ohio, on seven days' leave of absence.

Jones, Percy L., asst.-surgeon, reports arrival at Mt. Gretna, Pa., with engineer battalion.

McAndrew, P. H., asst.-surgeon, left Jefferson Barracks, Mo., with Squadron Fourth Cavalry, en route to Ride Range, Arcadia, Mo.

Phillips, Jno. L., surgeon, temporarily in charge of the office of chief surgeon, Department of the East, is relieved temporarily from his present duties as post surgeon, Fort Jay, and attending surgeon at department headquarters, and will report direct to Division Headquarters, for duty in connection with field exercises at Manassas.

Edger, Beal, J., Jr., asst.-surgeon, promoted captain and asst.-surgeon, U. S. Army, to rank from June 14, 1904.

Davidson, W. T., asst.-surgeon, arrived at San Francisco on transport *Buford* from Manila.

Miller, Edgar W., asst.-surgeon, left Fort Clark, Texas, on practice march with Third Squadron, First Cavalry, en route to Camp Eagle Pass, Texas.

Wilson, James S., asst.-surgeon, reported for temporary duty at Fort Monroe, Va.

Wheeler, Wm. L., asst.-surgeon, left Fort Ethan Allen, Vt., en route to Fort Adams, R. I., for temporary duty.

Stiles, Henry R., asst.-surgeon, leave of absence on account of sickness extended three months.

Vose, William H., asst.-surgeon, granted two months' leave of absence, to take effect on arrival at Fort Logan H. Roots, Ark., of a medical officer to be ordered there to relieve him.

Minor, James C., contract surgeon, granted fifteen days' leave of absence from the Army and Navy General Hospital, Hot Springs, Ark., to take effect about June 25.

Allen, Ira A., contract surgeon, relieved from further duty in the Philippine Division and assigned to duty at the expiration of his present leave of absence to Fort Dade, Fla.

Feeney, John M., contract surgeon, now on leave of absence from the Philippine Division, has been granted an extension of one month.

Stoney, Randell C., contract surgeon, granted leave of absence from June 18 to July 3 from Fort Hamilton, N. Y.

Titus, Frank H., contract surgeon, arrived at Ord Barracks, Cal., for duty.

Adair, George F., contract surgeon, returned June 13 to his proper station, Fort Wadsworth, N. Y., from temporary duty at Fort Hamilton, N. Y.

Geddings, E. F., asst.-surgeon, leave of absence extended thirty days.

Owen, William O., surgeon, granted thirty days' sick leave with permission to apply for thirty days' extension.

Appel, Aaron H., surgeon, granted ten days' sick leave of absence.

Rutherford, H. H., asst.-surgeon, relieved from further temporary duty at Army and Navy General Hospital, Hot Springs, Ark., and will return to his station, Fort Mackenzie, Wyo.

Davidson, Wilson T., asst.-surgeon, relieved from further duty in Philippine Division and assigned to duty at U. S. Army General Hospital, Presidio of San Francisco.

Shortlidge, R. D., asst.-surgeon, relieved from duty at U. S. General Hospital, Presidio of San Francisco, and ordered to Fort Miley, Cal., for duty.

Glennan, Jas. D., surgeon, detailed for duty as chief surgeon, First Provisional Division Army maneuvers at Manassas, Va.

Brooks, Wm. H., asst.-surgeon, relieved from duty at U. S. Army General Hospital, Washington Barracks, D. C., and ordered to Fort Washington, Md.

Reynolds, Chas. R., asst.-surgeon, relieved from duty at Fort Washington, Md., and ordered to U. S. A. General Hospital, Washington Barracks, D. C., for duty.

Reynolds, F. P., asst.-surgeon, granted two months' leave, to take effect when relieved from duty at U. S. A. General Hospital, Washington Barracks, D. C.

Crampton, Louis W., deputy surgeon general, granted twenty days' sick leave of absence.

Raymond, Thomas U., surgeon, in addition to present duties, will take charge of the Medical Supply Depot, St. Louis, during the absence of Lieutenant Colonel Crampton on sick leave.

Shimer, Ira A., asst.-surgeon, granted thirty days' leave of absence about July 1, 1904.

Barney, Chas. N., asst.-surgeon, assigned to temporary duty in C. S. O. Department of the East, and will proceed from Fort Schuyler to Governor's Island, N. Y., daily and return for that service until July 1, 1904.

Merrick, John N., contract surgeon, ordered from Fort Missoula, Mont., to Fort Yellowstone, Wyo., for duty in the National Park during the tourist season.

Felts, Robert L., contract surgeon, returned to Fort Sam Houston, Texas, June 13, from leave of absence.

Daywalt, George W., contract surgeon, granted leave of absence for one month, beginning July 9.

Van Kirk, Harry H., contract surgeon, arrived at Fort Sill, Okla., June 16, for duty.

Decker, George [illegible], contract dental surgeon, left Fort Du Chesne, Utah, for duty at Fort [illegible], Utah, June 13.

[illegible], contract dental surgeon, left Fort Riley, Kan., June 16, on leave of absence for [illegible] days.

Thornton, James W., contract surgeon, arrived at San Francisco June 13 from the Philippine Division, and assigned to temporary duty at Fort McDowell, Cal.

Wilkins, Archibald M., contract surgeon, arrived at San Francisco June 13 from the Philippine Division, and assigned to temporary duty at Fort Baker, Cal.

Love, Joseph W., contract surgeon, arrived at San Francisco June 14 from the Philippine Division on leave of absence for two months.

Bailey, Edward B., contract surgeon, arrived at San Francisco, June 13, from the Philippine Division, and assigned to duty at Fort Miley, Cal.

Griswold, W. Church, contract surgeon, arrived at San Francisco June 13 from the Philippine Division, and assigned to temporary duty at the Presidio of San Francisco.

Stoney, Randell, contract surgeon, relieved from duty at Fort Hamilton, N. Y., to take effect July 2, 1904, and ordered to his home for annulment of contract.

Kellogg, W. V., contract surgeon, leave of absence extended two months on surgeon's certificate of disability, and at expiration of leave of absence ordered to his home for annulment of contract.

Halsell, John T., contract surgeon, leave of absence extended one month.

Navy Changes.

Changes in the medical corps, U. S. Navy, for the two weeks ending June 25, 1904:

Hart, G. G., A. A. surgeon, ordered to the *Alliance* for temporary duty, and on arrival of that vessel at Culebra, W. I., detached and ordered home to wait orders.

Mink, O. J., and Porter, F. R., asst.-surgeons, appointed asst.-surgeons with rank of lieutenant, junior grade, from June 7, 1904.

Chapman, R. B., asst.-surgeon, detached from the Naval Hospital, Mare Island, Cal., June 27, and ordered to the Navy Yard, Washington, D. C.

Balch, A. W., asst.-surgeon, ordered to the Naval Museum of Hygiene and Medical School, Washington, D. C.

Kite, I. W., surgeon, when discharged from treatment at the Naval Hospital, Pensacola, Fla., ordered home and granted sick leave for two months.

Biddle, C., surgeon, ordered to the *Wisconsin* for duty as fleet surgeon.

Dykes, J. R., asst.-surgeon, ordered to the *Rainbow*.

Verner, W. W., asst.-surgeon, ordered to the *Wisconsin*.

Oman, C. M., asst.-surgeon, detached from the Naval Station, Cavite, and ordered to the *Frolic*.

DeBruler, J. P., and Dean, F. W. S., asst.-surgeons, ordered to the Naval Station, Olongopo, P. I.

Geiger, A. J., ordered to the Naval Hospital, Yokohama, Japan.

Rennie, W. H., Hoen, W. S., Grieve, C. C., asst.-surgeons, ordered to the Naval Station, Cavite, P. I.

Morse, E. T., pharmacist, ordered to the Naval Station, Cavite, P. I.

Marcour, R. O., asst.-surgeon, detached from the *Hancock* and ordered home and granted leave for three months, and resignation to be accepted Sept. 27, 1904.

Angwin, W. A., asst.-surgeon, ordered to the Naval Hospital, Mare Island, Cal.

Marine-Hospital Service.

Official list of the changes of station and duties of commissioned and non-commissioned officers of the Public Health and Marine-Hospital Service, for the fourteen days ended June 9, 1904:

Purviance, George, assistant surgeon general, granted leave of absence for twenty days from May 31.

Vaughan, G. T., and Geddings, H. D., assistant surgeon generals, detailed to represent the service at session of American Medical Association, Atlantic City, N. J., June 7-10.

Carter, H. R., surgeon, directed to report to chairman of Isthmian Canal Commission for duty.

Carmichael, D. A., surgeon, bureau letter of May 4, granting leave of absence for fifteen days from May 12, amended to read twelve days from May 12.

Peckham, C. T., surgeon, granted leave of absence for seven days from May 28, 1904, under paragraph 191 of the regulations. Relieved from duty at the Immigration depot, New York, and directed to proceed to Buffalo and assume command of the service, relieving Surgeon Eugene Wasdin.

Wasdin, Eugene, surgeon, on being relieved by Surgeon C. T. Peckham, to proceed to Memphis, Tenn., and assume command of the service, relieving Surgeon G. M. Magruder. Granted extension of leave of absence on account of sickness for sixteen days from May 1.

Magruder, G. M., on being relieved by Surgeon Eugene Wasdin, to proceed to Cincinnati and assume command of the service.

Young, G. B., passed assistant surgeon, two days' leave of absence under Paragraph 189 of the Regulations.

Rosenau, M. J., passed assistant surgeon, detailed to represent the service at meeting of International Association for Study and Prevention of Tuberculosis, Atlantic City, N. J., June 6. Detailed to represent service at session of American Medical Association, Atlantic City, June 7-10, stopping at Philadelphia en route, on special temporary duty.

Nydegger, J. A., passed assistant surgeon, granted extension of leave of absence, on account of sickness, for twenty-one days from May 21.

Oakley, J. H., passed assistant surgeon, directed to proceed to Vancouver, B. C., for special temporary duty.

Anderson, J. F., passed assistant surgeon, directed to proceed to Detroit for special temporary duty.

Gwyn, M. K., assistant surgeon, directed to report to chairman of examining board at Manila, P. I., Aug 8, 1904, for examination to determine his fitness for promotion to the grade of passed assistant surgeon.

Baker, R. C., acting assistant surgeon, granted leave of absence for fourteen days from June 13.

[illegible], J. M., acting assistant surgeon, granted leave of absence for [illegible] days.

Foster, J. P. C., acting assistant surgeon, granted leave of absence for four days from June 5.

Goldsborough, B. W., acting assistant surgeon, granted leave of absence for four days from June 7.

Hallett, E. B., acting assistant surgeon, granted leave of absence for four days from June 7.

Mason, W. C., acting assistant surgeon, granted leave of absence for five days from June 27.

Rodman, J. C., acting assistant surgeon, granted leave of absence for seven days from June 7.

PROMOTION.

Hall L. P., pharmacist of the third class, promoted to be pharmacist of the second class, effective from April 19.

BOARD CONVENED.

Board convened at Washington, D. C., June 1, 1904, for the physical examination of an officer of the Revenue-cutter Service. Detail for the board: Assistant Surgeon General L. L. Williams, chairman; Assistant Surgeon General W. J. Pettus, recorder.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon General, Public Health and Marine-Hospital Service, during the week ended June 17, 1904:

SMALLPOX—UNITED STATES.

California: San Francisco, May 9-June 5, 1 case.
District of Columbia: Washington, May 8-June 4, 7 cases.
Florida: Jacksonville, June 4-11, 1 case.
Georgia: Macon, June 4-11, 1 case.
Illinois: Chicago, June 4-11, 1 case.
Iowa: Dubuque, June 4-11, 2 cases.
Kentucky: Covington, June 4-11, 2 cases.
Louisiana: New Orleans, June 4-11, 5 cases.
Maryland: Baltimore, June 4-11, 6 cases.
Michigan: June 4-11, Detroit, 3 cases; Grand Rapids, 1 case.
Missouri: St. Louis, May 28-June 4, 22 cases.
Nebraska: Omaha, June 4-11, 3 cases.
New Hampshire: Manchester, June 4-11, 8 cases.
New York: Buffalo, May 28-June 4, 5 cases; New York City, June 4-11, 1 death.
Ohio: Cincinnati, May 27-June 3, 10 cases; June 4-11, Dayton, 2 cases; Toledo, 1 case; Zanesville, April 30-May 7, 1 case.
Pennsylvania: Altoona, May 4-11, 4 cases; June 4-11, Philadelphia, 4 cases, 2 deaths; Pittsburg, 2 cases.
South Carolina: Greenville, May 28-June 4, 2 cases.
Tennessee: June 4-11, Memphis, 4 cases; Nashville, 2 cases.
Washington: Tacoma, May 29-June 6, 1 case.
Wisconsin: Milwaukee, June 4-11, 6 cases.

SMALLPOX—FOREIGN.

Austria: Prague, May 14-21, 12 cases.
Brazil: Campinihas, April 17, epidemic.
Canada: Winnipeg, May 27-June 4, 2 cases.
China: Canton, April 26, present.
Colombia: Barranquilla, May 23-29, 1 death.
France: Paris, May 21-28, 13 cases.
Great Britain: Bradford, May 7-21, 11 cases; May 14-21, Bristol, 5 cases; Sheffield, 2 cases; May 21-28, Dundee, 1 case; Edinburgh, 2 cases; Newcastle-on-Tyne, 2 cases; Nottingham, 7 cases; Glasgow, May 27-June 3, 334 cases, 1 death; May 14-28, Hull, 8 cases; Manchester, 6 cases; London, May 21-28, 33 cases, 2 deaths.
India: Bombay, May 3-17, 46 cases; Karachi, May 8-15, 7 deaths.
Italy: Leghorn, April 10-17, 1 case; Palermo, May 7-14, 1 case.
Japan: Nagasaki, May 1-10, 40 cases, 18 deaths.
Panama: May 22-June 5, 1 case.
Russia: Moscow, May 14-21, 15 cases, 5 deaths; Odessa, May 21-28, 5 cases; St. Petersburg, May 14-28, 25 cases, 7 deaths.

YELLOW FEVER.

Costa Rica: Limon, May 21-June 4, 3 cases.
Ecuador: Guayaquil, May 11-25, 24 deaths.
Mexico: May 21-28, Coatzacoalcos, 3 cases; Jallipan, 2 cases; Merida, May 22-June 4, 5 cases, 1 death; Salina Cruz, May 28-June 4, 1 case, 1 death; Tehuantepec, May 22-June 4, 11 cases, 2 deaths; Vera Cruz, June 4-11, 1 case, 1 death.

CHOLERA.

India: Madras, April 30-May 6, 1 death.
Turkey in Asia: To May 9, 105 cases, 130 deaths.

PLAGUE—INSULAR.

Hawaii: Honolulu, June 8, 1 death.

PLAGUE—FOREIGN.

Africa: Cape Colony, May 9-16, 1 case.
Arabia: Aden, May 15-24, 4 cases, 2 deaths.
Argentina: Tucuman, May 7, present.
Australia: Brisbane, April 16-30, 4 cases, 2 deaths; Sydney, April 9-23, 2 cases, 1 death.
Egypt: April 30-May 7, Port Said, 3 cases, 3 deaths; all Egypt, 41 cases, 18 deaths.
Formosa: April 23-May 14, 1,222 cases, 842 deaths.
India: Bombay, May 10-17, 567 deaths; Karachi, May 8-15, 127 cases 105 deaths.
Peru: Lima, May 7-14, 9 cases, 6 deaths.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon General, Public Health and Marine-Hospital Service, during the period from June 17 to 25, 1904:

SMALLPOX—UNITED STATES.

Colorado: Denver, April 16-May 28, 14 cases.
Delaware: Wilmington, June 11-18, 1 case.
Florida: Jacksonville, June 11-18, 1 case.
Georgia: Macon, June 11-18, 2 cases.
Illinois: Chicago, June 11-18, 5 cases.
Louisiana: New Orleans, June 11-18, 2 cases.
Maryland: Baltimore, June 11-18, 1 case, 1 death.
Missouri: Bonpett, June 11-18, 1 case.
Missouri: St. Louis, June 4-18, 16 cases, 1 death.
Nebraska: June 11-18, Omaha, 2 cases; South Omaha, 1 case.
New Hampshire: Manchester, June 11-18, 7 cases.
New York: Buffalo, June 11-18, 1 case.
Ohio: Cincinnati, June 5-17, 10 cases; Dayton, June 11-18, 4 cases; Hamilton, June 7-14, 2 cases.
Pennsylvania: June 11-18, Altoona, 2 cases; Philadelphia, 8 cases, 4 deaths.
South Carolina: Charleston, June 11-18, 1 case.
Tennessee: June 11-4, Memphis, 5 cases; Nashville, 5 cases.
Wisconsin: Milwaukee, June 11-18, 8 cases.

SMALLPOX—INSULAR.

Philippine Islands: Manila, April 30-May 7, 2 cases, 3 deaths.

SMALLPOX—FOREIGN.

Austria: Prague, May 21-28, 13 cases.
Belgium: Antwerp, May 28-June 4, 2 cases.
Brazil: Pernambuco, May 1-15, 33 deaths; Rio de Janeiro, May 8-22, 226 cases, 100 deaths.
Canada: Vancouver, May 1-31, 6 cases, 1 death.
France: Lyons, May 14-28, 4 deaths; Paris, May 28-June 4, 18 cases.
Gibraltar: May 22-28, 1 case.
Great Britain: May 28-June 4, Birmingham, 2 cases; Bradford, 5 cases; Cardiff, 2 cases; Dundee, 2 cases; Edinburgh, 5 cases; Hull, 4 cases; Liverpool, 2 cases; London, 10 cases; Manchester, 6 cases; Newcastle-on-Tyne, 5 cases; Nottingham, 3 cases; Bristol, May 28-June 11, 9 cases; Glasgow, June 5-18, 12 cases, 2 deaths.
India: Bombay, May 17-24, 13 deaths; Calcutta, May 14-21, 1 death; Karachi, May 15-22, 3 cases, 2 deaths.
Italy: Milan, April 1-30, 1 case; Palermo, May 14-June 4, 10 cases, 3 deaths.
Japan: Nagasaki, May 11-20, 18 cases, 6 deaths.
Mexico: City of Mexico, May 28-June 5, 6 cases, 4 deaths; Vera Cruz, May 26-June 4, 1 case imported.
Netherlands: Amsterdam, June 4-11, 1 case.
Panama: Panama, June 5-12, 1 case.
Russia: Moscow, May 21-28, 9 cases, 9 deaths; Odessa, May 26-June 4, 8 cases, 1 death; Warsaw, April 30-May 14, 40 deaths.
Turkey: Constantinople, May 27-June 6, 3 deaths.

YELLOW FEVER.

Brazil: Rio de Janeiro, May 8-22, 10 cases, 5 deaths.
Ecuador: June 5-12, Bahia, 1 case; Pernambuco, 5 cases, 2 deaths; Vera Cruz, May 28-June 4, 3 cases.

PLAGUE—INSULAR.

Hawaii: Honolulu, June 10, 1 case.
Philippine Islands: Manila, April 30-May 7, 6 cases, 5 deaths.

PLAGUE—FOREIGN.

Egypt: May 14-21, 36 cases 36 deaths.
India: Bombay, May 18-24, 160 deaths; Calcutta, May 14-21, 134 deaths; Karachi, May 15-22, 87 cases, 70 deaths.

CHOLERA.

India: Calcutta, May 14-21, 111 deaths; Madras, May 14-20, 1 death.

State Boards of Registration.

COMING EXAMINATIONS.

Arizona Board of Medical Examiners, July 4, Phoenix. Secretary, William Duffield, M.D., Phoenix.
Utah State Board of Medical Examiners, July 4, Salt Lake City. Secretary, R. W. Fisher, M.D., Salt Lake City.
North Dakota State Examining Board, July 5, Grand Forks. Secretary, H. M. Wheeler, M.D., Grand Forks.
Board of Medical Examiners of the State of Oregon, July 5-7, Portland. Secretary, Byron E. Miller, M.D., the "Dekum," Portland.
Washington State Board of Medical Examiners, July 5-7, Spokane. Secretary, F. B. Swearingen, Tacoma.
Rhode Island State Board of Health, July 7, State House, Providence. Secretary, Gardner T. Swarts, M.D., Providence.
Board of Registration in Medicine of Massachusetts, State House, Boston, July 11 and 12. Secretary, Edwin B. Harvey, M.D., Boston. Secretary, Hugh A. Barbee, Point Pleasant.
Illinois State Board of Health, The Coliseum Annex, Chicago, July 20, 21 and 22. Secretary, J. A. Egan, M.D., Springfield.
West Virginia State Board of Health, July 19, 20 and 21, Charleston. Secretary, Hugh A. Barbee, Point Pleasant.
Indiana State Board of Medical Registration and Examination, July 12, State House, Indianapolis. Secretary, W. T. Gott, M.D., Crawfordsville.
Arkansas State Medical Board of Examiners, July 12, Little Rock. Secretary, J. F. Runyan, M.D., Little Rock.
Connecticut Medical Examining Board, July 12-13, City Hall, New Haven. Secretary, Charles A. Tuttle, M.D., New Haven.
Wisconsin State Medical Board, July 12, Madison. Secretary, F. A. Forsbeck, M.D., Milwaukee.
Board of Medical Examiners of the State of California, July 12, Los Angeles. Secretary, George G. Gere, M.D., San Francisco.
Maine Board of Registration of Medicine, July 12 and 13, City Building, Portland. Secretary, A. K. P. Meserve, M.D., Portland.
Vermont State Board of Medical Censors, July 13-14, Y. M. C. A. Building, Burlington. Secretary, S. W. Hammond, Rutland.
South Dakota Board of Medical Examiners, July 13 and 14, Watertown. Secretary, H. E. McNutt, M.D., Aberdeen.
Board of Medical Supervisors of the District of Columbia, July 14, Washington. Secretary, Wm. C. Woodward, M.D., Health Department, Washington.

The Medical Practice Act of Indian Territory.—Considerable uncertainty has existed with reference to the requirements of the medical laws in Indian Territory. Hitherto, the various nations of the Territory, the Cherokee, Creek and Choctaw, have had separate laws, thus creating considerable confusion. In April, 1904, Congress enacted a law regulating the practice of medicine and surgery in this territory. The territory was divided into four districts (Northern, Southern, Central and Western), each of which has a board of medical examiners who hold examinations on the first Monday in January, April, July and October of each year, and at such other time as may be necessary. Those engaged in practice at the time of the passage of the new law have six months in which to present their diplomas to the board of the district in which they wish to practice. Those who have no diploma must, within six months, submit sworn applications setting forth the extent of their qualification and their experience as practitioners, and submit to an examination by the board. Those holding diplomas must submit them to the board of examiners for the district in which they desire to practice, for examination and approval, for which a fee of $1.00 is required. Approval of the diploma obviates the necessity of further examination by the board.

"No person holding a diploma issued after July 1, 1904, shall be permitted to practice medicine or surgery for pay, . . . except that the diploma be issued by a medical school or college requiring a preliminary examination for admission to its course of study in all the common branches and in higher mathematics, which requirements shall be published regularly . . . by said school, and said school or college shall also require as a requisite for granting the degree of doctor of medicine attendance upon at least four courses of lectures of six months each, no two of said courses to be held within one year. Said college must have a full faculty of capable professors in all the different branches of medical education, to wit, anatomy, physiology, chemistry, toxicology, histology, pathology, hygiene, materia medica, therapeutics, obstetrics, bacteriology, medical jurisprudence, gynecology, principles and practice of medicine and surgery, and specially requiring clinical instruction in the last two subjects of not less than four hours per week in each of the last three courses.

"Any persons who shall prescribe or administer medicine for, or who shall in any manner treat disease, wounds, fractures, or other bodily injury for pay, shall be deemed physicians and surgeons. Osteopathy, massage, Christian science and herbal treatment shall not be affected by this act."

The next examination will be held July 4, 5, 6 and 7 at South McAlester, Ardmore, Vinita, and Muskogee. Dr. B. W. Caldwell of Hugo, I. T., is the secretary of the Central District; Dr. B. F. Fortner of Vinita, secretary of the Northern District; Dr. E. E. Chivers of Mannsville, secretary of the Southern District. The board for the Western District has not been appointed.

Medical Organization.

Arizona.

YAVAPAI COUNTY MEDICAL SOCIETY.—This society was organized on the standard plan at Prescott, June 18, with 14 charter members. The following officers were elected: Dr. Thomas B. Davis, president; Dr. Will S. Smith, vice-president, and Dr. Clarence E. Yount, secretary-treasurer, all of Prescott; delegates to the Arizona Medical Association, Drs. J. W. Coleman, Jerome, and John S. Barrett, Prescott; and censors, Drs. Henry D. Thomason, U. S. Army, Whipple Barracks, James N. McCandless, Prescott, and John Dennett, Jr., Congress.

California.

ELDORADO COUNTY MEDICAL SOCIETY.—Physicians of the county met at Placerville, May 31, and organized a medical

society on the standard plan with the following officers: President, Dr. William S. Hickman, Georgetown, and secretary and treasurer, Dr. Luther M. Leisenring, Pleasantville.

Delaware.

DELAWARE STATE MEDICAL SOCIETY.—The one hundred and fifteenth annual session was held at Lewes, June 14, 1904. At the previous session a committee had been created to report a constitution and by-laws in conformity with the plan of organization recommended by the American Medical Association. The address of President Kolluck was devoted mainly to the purposes and possibilities of a complete organization of the profession of Delaware and of the United States. Later, the committee reported the standard constitution and by-laws with only such modifications as were necessary to adapt them to local conditions, and after full consideration, they were adopted unanimously. The society also decided to hold its annual meetings in the fall in accordance with the recommendation of the House of Delegates of the American Medical Association at the Atlantic City session, so as to give the members better opportunities for attending both the state and national associations.

The following officers were elected for the coming year: President, Dr. Alexander I. Lowber, Wilmington; vice-presidents, Drs. William F. Haines, Seaford, and Benjamin Whitely, Catonsville; secretary, Dr. John Palmer, Jr., Wilmington; assistant secretary, Dr. Joseph W. Bastian, Wilmington, and councilors, Drs. Peter W. Tomlinson, Wilmington; James H. Wilson, Dover; and Robert B. Hopkins, Milton. One could not but be impressed with the culture and urbanity of the profession of Delaware. A majority of the physicians are already members of the state society, but, outside of Wilmington, practically no attention has heretofore been given to local organization and attendance at the annual meetings is usually small, and the session too short for much to be accomplished. The state is compact and densely populated, the facilities for travel are unusually good, and the councilors, officers and members have entered on the new work with an enthusiasm which promises immediate results possible in few other states.

Illinois.

HENDERSON COUNTY MEDICAL SOCIETY.—At a meeting held in Stronghurst, June 6, the reorganization of the society on the standard plan was effected. The following officers were elected: Dr. Isaac F. Harter, Stronghurst, president; Dr. Hugh L. Marshall, Stronghurst, vice-president; Dr. Ralph Graham, Biggsville, secretary and treasurer, and Drs. Riggs, Media, William D. Henderson, Biggsville, and Nathan Barlow, Lomax, censors.

Indiana.

ELKHART COUNTY MEDICAL SOCIETY.—The new constitution of this society in conformity with that of the American Medical Association, went into effect June 1.

Oklahoma.

CUSTER COUNTY MEDICAL SOCIETY.—Dr. Mahlon A. Kelso, Enid, councilor for the Third District, met fourteen physicians of the county at Arapahoe, June 7, and assisted in organizing a county society on the standard plan, with the following officers: President, Dr. Robert McCullough, Arapahoe; vice-president, Dr. William J. Omer, Thomas; secretary-treasurer, Dr. Everett S. Lain, Weatherford; censors, Drs. J. Johnson Williams, Weatherford, K. D. Gossom, Graves, and Walter E. Hempstead, Arapahoe. This is the first county society organized in conformity with the American Medical Association since the reorganization of the territorial society.

Society Proceedings.

COMING MEETINGS.

American Ophthalmological Society, Atlantic City, July 12.
Washington State Medical Association, Seattle, July 13-15.

WISCONSIN STATE MEDICAL SOCIETY.

Fifty-eighth Meeting, held at Milwaukee, June 29-31, 1904.

Officers Report Era of Prosperity.

The house of delegates held its first meeting under the constitution, and the celerity with which business was dispatched demonstrated the advantages of the new plan of organization. The councilors recounted the successful organization of county medical societies. The treasurer's report showed the society to be in a flourishing condition financially.

The secretary gave an interesting account of the labors of the councilors and officers in the reorganization work, the great increase in membership and the new era of prosperity on which the society had evidently entered. He said that the new constitution was working to better advantage than its most sanguine advocate had dared to hope. A business committee of five was appointed to determine what communications offered should be referred to the council.

In addition to Dr. Evans, who holds over, the following delegates and alternates to the next session of the American Medical Association were selected: Dr. John Wallbridge, alternate to Dr. Evans; Dr. W. T. Sarles—Dr. C. S. Sheldon, alternate; Dr. Bennett of Beloit—Dr. J. M. Dodd, alternate.

La Crosse was selected as the next place of meeting.

The state was redistricted into twelve convenient districts, not following Congressional divisions.

A contract was made with the Milwaukee Medical Journal for the publication of the proceedings of the society for the ensuing year on the same terms as preceding contract.

A petition requesting speedy enactment of the bill by Congress incorporating the American Medical Association was signed by delegates.

At the Friday meeting the question of changing the time of meeting to fall was postponed for one year.

The New Officers.

The following officers were elected for the ensuing year: President, Dr. C. W. Oviatt, Oshkosh; vice-presidents, Drs. J. L. Bradfield, La Crosse; Gilbert E. Seaman, Milwaukee, and A. D. Rosenberry, Wausau.

COUNCILORS.

For One Year—First District, H. B. Sears of Beaver Dam; Second District, John Meacham of Racine.
For Two Years—Third District, J. T. Nye of Beloit; Fourth District, E. S. Hooper of Darlington.
For Three Years—Fifth District, J. F. Pritchard of Manitowoc; Sixth District, John B. Walbridge of Berlin.
For Four Years—Seventh District, W. T. Sarles of Sparta; Eighth District, J. T. Bodelinge of Marinette.
For Five Years—Ninth District, A. R. Sauerbering of Wausau; Tenth District, E. L. Boothby of Hammond.
For Six Years—Eleventh District, J. M. Dodd of Ashland; Twelth District, A. T. Holbrook of Milwaukee.

It was decided to arrange the program for next year's meeting in two sections.

The question of allowing proprietary medicine companies to present their exhibits was left to the local Committee of Arrangements at La Crosse.

The question of non-resident members was brought up, and it was decided that there could be no non-resident active membership under the constitution, but that non-residents could become honorary members.

The attendance at the house of delegates was 50, and the attendance at the society meetings 400; 1,230 members of the society have paid dues for 1904.

The Ethical Conduct of the Physician.

Before the general meeting, Wednesday, the president, Dr. F. E. Walbridge, delivered his annual address. Among other things, he said: "There are too many low-grade schools. Newspaper doctors are a great evil. When a physician voluntarily puts himself in the public eye in a manner that must be considered immodest and improper, we must feel it to be an offense. Do not talk for publication for the sake of notoriety. Much expert testimony is biased, and some is the result of crass ignorance. The aim of expert testimony, in addition to its applicability to a given case, ought to be the accumulation of facts which can serve as a basis for future action in similar cases. The only remedy for the evil is honest action and love of truth."

Surgical Treatment of Intestinal Obstruction.

DR. F. SHLIMOWEK, Milwaukee, in a paper on "The Indication for Enterotomy," said that in intestinal obstruction opium is usually contraindicated, as it masks the symptoms. Enterotomy frequently saves life. It is a safe procedure and should be more frequently employed.

DISCUSSION.

DR. W. A. BATCHELOR, Milwaukee, said: "In many cases of general peritonitis this procedure will improve the patient's chances, although post-operative sequelæ frequently follow operation. The chief indication for enterotomy is over-distension. Patients of this character frequently endure anesthesia badly."

DR. F. THIENHAUS, Milwaukee, advocated evisceration as an operative procedure, a view which was opposed by the writer of the paper.

Premature Labor to Save the Mother's Life.

DR. T. L. HAMMONTON, Milwaukee, read a paper on "The Moral Aspect of Abortion, Craniotomy and Extrauterine Pregnancy." He said: "The physician has no right to sacrifice the unborn child to save the mother. We are justified in removing the sac in extrauterine pregnancy before the fourth month, if there is danger to the mother. Craniotomy on the living child is never justified."

DISCUSSION.

DR. J. J. MCGOVERN, Milwaukee, said that we are not only justified, but it is our duty, under certain conditions, to induce premature labor or abortion to save the mother's life. Not over 40 per cent. of conceptions reach maturity, and the mother's life is, therefore, more valuable than the child's. Medical societies should attempt to stop criminal abortions. When the mother's life is in peril the first consideration must be given the mother.

DR. EDWARD EVANS, La Crosse, said that he believed that 50 per cent. of the physicians in Wisconsin would perform criminal abortions. This statement was indignantly denied by members of the society.

Less Drugs in Labor.

DR. J. F. FOHS, Omro, said: "There is a tendency toward a less use of drugs in labor. The use of ergot still seems to be justified by a number of general practitioners (a recent instance was cited from a late number of THE JOURNAL of the American Medical Association, in which case the use of ergot was promptly condemned by the editor), but such use of the drug is not in accord with the teachings of leading obstetricians. The only safe place for ergot is as a hæmostatic and indirect post-partum antiseptic. Quinine and other so-called oxytocics act as nerve stimulants and muscular tonics. The exigencies of rural practice render it certain that drugs will be used.

DISCUSSION.

DR. HUGO PHILIPP, Waukesha, said he would as soon go to a case of labor without his scissors as without chloroform. The use of chloroform in labor meets with general favor.

Intermittent Claudication and Analogous Phenomena.

DR. ARTHUR J. PATEK, Milwaukee, read a paper and concluded: Intermittent claudication is a more frequent symptom complex than is generally recognized. It is often confounded with sciatica, neuralgia and rheumatism. The diagnosis will be made certain by noting an absence of pulsation in one or more distal arteries of one or both legs. The pain is due to an arteritis plus angiospasm of the affected vessel. The various internal viscera may suffer from such an angiospasm when their vessels are sclerosed as in angina pectoris. Total occlusion of the vessels may lead to gangrene of an extremity, to prevent which early recognition of the disease is important.

DISCUSSION.

DR. W. H. WASHBURN, Milwaukee, said that statistics presented by Dr. Cabot of Boston seemed to show that alcohol was not a causative factor in this disease. Trunecek's so-called serum introduced hypodermically in cases of arteriosclerosis involving cerebral vessels has produced excellent results.

Estimation of Indemnity for Accidental Loss of One or Both Eyes.

DR. H. V. WÜRDEMANN, Milwaukee, said: Present usages for the estimation of pensions, insurance and damages for the injury of vision are based wholly on precedent and are purely empirical. The relation of the visual act to earning ability is susceptible of mathematical demonstration. The effect on the earning ability may be determined by the particular injury to vision. Insurance contracts could equitably be made subject to the amount of economic damage. In the case of one eye the rates should be modified to between 15 and 20 per cent. of the total disability. Pensions should be based on the full economic damage. Probable economic damage should be the principal element of damages in suits at law. The calculations of Magnus, as modified by the writer, afford a just means of calculating probable economic damage.

DISCUSSION.

DR. WALTER KEMPNER said that physicians make a great mistake when testifying in courts in using too technical language. They should talk plain English, and there will be no difficulty in getting a clear judgment from the jury, based on the opinion of the witness.

DR. G. B. SEAMAN, Milwaukee, said that the estimates of indemnity were based on the figures of German specialists. It is impracticable to grant full economic damages.

DR. WÜRDEMANN said that economic damage is the principal factor on which claims at law should be allowed, taking into consideration the factors of pain, anguish, etc.

Active Principles in Therapeutics.

DR. E. L. BOOTHBY, Hammond, read a paper regarding "Lack of Progress in Scientific Therapeutics." He said: "The obsolete and useless should be eliminated. I can carry in my vest pocket more medicine, in better shape for immediate use and positive results, than the best span of mules owned by Uncle Sam can haul down hill of the antiquated, useless proprietaries used in the United States Army to-day. We should have a revised standardization, based on active principles, and colleges should drop the dangerous medication of the past and teach up-to-date drug therapeusis. The proper principle of practice is to use active principles wherever obtainable."

DISCUSSION.

DR. F. R. WEBER, Milwaukee, said: "Wonderful progress has been made in therapeutics. We can not now afford to treat any case of infectious disease without applying the ice-bag to the heart. I desire strongly to defend the modern hospital, and to state that many children are lost through the folly of parents in refusing to send them to hospitals when occasion requires."

Therapeutic Uses of the Roentgen Ray in Dermatology.

DR. LOUIS FRANK, Milwaukee, said that he had obtained good results in cases not involving the deeper structures. He advised caution in the use of this two-edged sword; it should not be used in milder affections until milder agents have failed.

DISCUSSION.

DR. J. J. MADISON, Milwaukee, agreed on the successful treatment of superficial growths by means of the *x*-ray.

DR. H. V. WÜRDEMANN, Milwaukee, called attention to radiotherapy as a valuable adjunct after radical operation for removal of malignant growths.

The Borderland Between Medicine and Surgery.

DR. JAMES C. WILSON, Philadelphia, delivered the Annual Address in Medicine. He said: "Border line conditions cover the organs of the large cavities of the body. Probable diagnosis of biliary calculus is an indication for surgical interference. Operation on brain tumors is frequently advisable. Exophthalmic goitre is on the border line; medicine produces some improvements, few cures and overwhelming failures; the best results are offered by surgery, but they are not very satisfactory. The drift of opinion with reference to lung surgery is radical. Tubercular foci have been removed from the lungs by surgical interference. In sacculbrinous effusions, repeated aspirations are the proper treatment. In stomach surgery the results in pyloric operations have been excellent. No gallstone can be dissolved in situ. Cholelithiasis is distinctly a surgical disease. In atrophic cirrhosis early operations offer a favorable prognosis. The infected appendix had better always be re-

moved; medical treatment is unsatisfactory, and most apparent recoveries have been merely periods of intensy."

Early Removal of All Neoplasms.

DR. C. W. OVIATT, Oshkosh, urged the early removal of all neoplasms, whether malignant or benign, claiming that very many benign tumors become malignant if not disturbed.

DISCUSSION.

DR. SUTTON said: "The presence of any form of neoplasm, whether malignant or benign, is a perversion from the normal type, and, as the mortality from removal in early stages is very slight, and as benign forms may tend to malignant degeneration, they should be removed at the earliest possible moment."

DR. MAYO, Rochester, Minn., agreed, for the same reason, that early removal of even benign tumors was advisable.

DR. A. H. LEVINGE, Milwaukee, took the opposite view, and said the conversion of the benign tumor into a malignant one, so far as pathology teaches at the present time, is a rare process.

Chronic Continued Secretion of the Gastric Juice.

DR. L. F. GERMAIN, Milwaukee, said: "It is important to differentiate between this condition and cancer. The diagnosis and therapeutics of diseases of the stomach to-day are on a less scientific basis than the diseases of any other organ of the body. It is absurd to give (as is often done) dilute hydrochloric acid to a patient suffering from hyper-secretion of gastric juice."

The Surgical Treatment of Dyspepsia.

DR. ROSWELL PARK, Buffalo, delivered the Annual Address on Surgery. He impressed the point that cancer has no symptomatology in any part of the body. In cancer of the stomach early operation is important, but the difficulty lies in making the diagnosis. A well-founded suspicion of any internal cancer amply justifies exploratory operation. Gallstones frequently cause what is vaguely denominated as dyspepsia. Cholelithiasis is essentially a surgical disease. The gall bladder is a superfluous organ, and, like the appendix, is prone to go wrong on slight provocation. Practically all diseases of the pancreas are surgical.

Epileptic Colony Desired.

DR. W. A. GORDON, Oshkosh, read a paper on "The Establishment of an Epileptic Colony." The many epileptics in institutions for the insane in Wisconsin have a very bad influence on the insane, and vice versa. The colony is the solution of the problem. Wisconsin is behind the times in this matter.

After much enthusiastic discussion, Dr. Gordon made a motion, which was unanimously carried, that the committee on public policy and legislation be instructed to present to the next session of the Wisconsin Legislature a proposition looking to the establishment of a colony for epileptics in the state.

A Review of Laryngeal Diphtheria.

DR. P. H. MCGOVERN, Milwaukee, read a paper at the general session Friday, in which he advocated very large doses of antitoxin. These are especially and promptly required in cases of laryngeal obstruction. There may be generalized infection in diphtheria, just as in pneumonia, yet many cases of generalized infection may be saved by the use of antitoxin in extraordinarily large doses. In these desperate cases this treatment has reduced the mortality from 20 per cent. to 5 or 6 per cent.

DISCUSSION.

DR. W. T. SABLER, Sparta, endorsed what Dr. McGovern

DR. HENRY B. HITZ, Milwaukee, said a case of laryngeal diphtheritic serum in secretional infection, thus preventing the diphtheritic sequelæ causing nephritic trouble.

DR. HENRY B. HITZ, Milwaukee, said a case of laryngeal diphtheria is usually a dead case, unless one gives copious doses of antitoxin.

DR. G. E. SHAMAN, Milwaukee, said there would be fewer cases of intubation necessary if larger and earlier doses of serum were used.

DR. MCGOVERN said nephritis is never the result of the antitoxin, but is the result of the general diphtheritic infection which has not been checked by the early use of antitoxin. Intubation is preferable to tracheotomy if skillfully performed, although the results of tracheotomy in the Glasgow Hospital, with only 6.5 per cent. mortality, can not be excelled.

Urea Estimation in Body Fluids.

DR. C. J. COLLINS, Oshkosh, read a paper on "Quantitative Estimation of Urea and Its Significance." Urea is important, he said, in determining nitrogenous waste, as in fevers; in judging of the activity of the liver by its ability to form urea, but first being sure of the ability of the kidney to excrete urea if formed, and as a means of diagnosis of danger in pregnancy.

DISCUSSION.

DR. D. W. HAMMERSCHLAG, Milwaukee, said: "To obtain valuable results, the amount of food taken in must be measured. It is of vastly more importance to estimate the amount of urea in the blood than in the urine. In the study of the urea, we should go back to the liver, as even a diseased kidney will excrete a normal amount of urea. We should differentiate between chronic rheumatism and those cases of gout in which there is a greater deficiency of urea than in chronic rheumatism. Uric acid itself is not poisonous, nor is urea very poisonous. Uric acid is not a retrograde product of ordinary proteids and does not go on to the formation of urea under any circumstances."

Tuberculosis Propaganda.

DR. J. W. COOK presented the report of the Committee on Tuberculosis, recommending co-operation in disseminating knowledge on the subject, and the establishment of sanatoria by the state and by the larger cities. The report was unanimously adopted, and a resolution urging the support of the state tuberculosis commission was passed.

Other papers were read by the following authors:

Dr. A. W. Myers, Milwaukee, "Some Home Modifications of Milk in Infant Feeding;" Dr. J. P. Cox, Spencer, "General Practice in Northern Wisconsin;" Dr. Charles Zimmerman, Milwaukee, "Affections of the Facial Nerve in Ear Diseases;" Dr. William Sickles, Milwaukee, "Radioactivity;" Dr. G. D. Ladd, Milwaukee, "Hydronephrosis;" Dr. William Mackie, Milwaukee, "Surgical Treatment of Cirrhosis of Liver;" Dr. Edward Evans, La Crosse, "A Case of Perisacrectal, Transrectal Perforation of Peritoneum, with Successful Result After Operation."

AMERICAN SURGICAL ASSOCIATION.

Twenty-fifth Annual Meeting, held in St. Louis, June 14-17, 1904.

Under the Presidency of Dr. N. P. Dandridge, Cincinnati.

President's Address.

President Dandridge departed somewhat from the practice of his predecessors, and took the members to the backwoods and interested them in the life and exploits of a pioneer doctor, Antoine François Saugrain de Vigni, who was born in Paris, Feb. 17, 1763.

Officers.

The following officers were elected: President, Dr. George Ben Johnston, Richmond, Va.; vice-presidents, Drs. Emmet Rixford, San Francisco, and James Bell, Montreal; secretary, Dr. Dudley P. Allen, Cleveland, Ohio; treasurer, Dr. George E. Fowler, Brooklyn, N. Y.

San Francisco was selected as the place for the next meeting, the date to be decided.

Minimum Requirements for Aseptic Operating in a Hospital in which the Personnel of the Operating Room is Permanent.

DR. A. J. OCHSNER, Chicago, pointed out the fact that with a permanent personnel a definite system could be developed, which was most satisfactory, because the observations which suggested changes as well as those which confirmed satisfactory methods could be carried through a large continuous series of cases under unchanged external conditions. Dr. Ochsner gave a detailed account of the system followed at the Augustana Hospital, where he had had an opportunity to develop uniform

methods with permanent conditions during fifteen years. Stress was laid on the danger which arises from tying sutures too tightly, thus causing pressure necrosis. The method of selecting assistants and nurses was described, and a table was shown illustrating the manner in which each assistant recorded the progress of the wounds under his care.

A paper on "What Are the Minimum Requirements for Aseptic Surgical Operations" was read by Dr. George H. Monks, Boston.

DR. CHARLES HARRINGTON, Boston, detailed his studies in asepsis, after which the three papers were discussed jointly.

DISCUSSION.

DR. DE FOREST WILLARD, Philadelphia, said that a hospital which had permanent assistants and nurses was likely to secure the best results.

DR. CHARLES B. NANCREDE, Ann Arbor, Mich., emphasized inhibition and tissue resistance. A germ might be inhibited to the point that would render it safe in a given wound.

DR. JOHN E. OWENS, Chicago, stated that different results were reported by different surgeons after using the same methods, and he had often wondered whether some of them might not have been due largely to the habits of surgeons.

DR. W. W. KEEN, Philadelphia, said he had adopted the use of chlorid of lime and carbonate of soda for cleansing the hands. Every person who took an active part in his clinic had a culture taken from the finger nails, and from the free surface of the skin. During last winter in only 3 out of 213 cultures was any result obtained. There was but one person who was free at every clinic, and that was the head nurse, who was a permanent official in the operating room. All the other assistants, except his principal assistant, changed every three months.

DR. W. B. COLEY of New York, did not believe sufficient stress had been laid on sterilization of the skin; his experiments showed that with careful preparation the day before operation, in addition to what was done on the day of operation, sterilization of the skin even then could not be said to be perfect. In 250 specimens of skin taken from the field immediately before operation, 25, or 9 per cent. of the cases showed all kinds of cultures, some of them being staphylococcus and streptococcus. Carefully sterilizing the hands, using tincture of green soap, brushing and hot water, then washing the hands thoroughly with 95 per cent. alcohol, with the use of rubber gloves, would give as good results as any of the measures which rendered the hands very hard. With reference to primary union, an important element in aseptic surgery was to guard against the bruising of tissues.

Forty-Six Operative Cases of Duodenal Ulcer.

DRS. CHRISTOPHER GRAHAM and W. J. MAYO, Rochester, Minn., stated that a careful history was of prime importance. The leading symptoms in the 46 cases reported were, first, pain, which might be due to peritonitis, distension from gas formation, pyloric spasm, and the irritation of acid gastric contents on open ulcer. The pain might come on in colics or last for some hours. Second, vomiting, principally of sour, bitter liquids, or if obstruction supervened, of food after varying intervals. Third, gastric insufficiency from interference with drainage. There was usually hyperacidity of gastric contents, constipation, and a great desire for food, although the patient reduced the diet and ate often a small quantity, but might fail to get the relief sometimes obtained in gastric ulcer proper. In latent cases, evidences of blood in the fecal movements might be the only sign. Differential diagnosis from pyloric ulcer in some cases might be impossible. A considerable number of cases closely resembled gallstone disease, and differentiation often could not be made except on the operating table. During the past eighteen months 27 per cent. of their operative gastric and duodenal ulcers involved the duodenum. There were thirty-three males, and thirteen females. In forty-three out of forty-six cases the ulcer was easily detected on abdominal exploration as a thick, white, scar-like area. Liability of duodenal ulcer to perforate is greater than gastric, but more often safely protected by adhesions. Relatively sterile contents is also favorable. In all cases the ulcer was situated in the first two and one-half inches below the pylorus, and entirely above the entrance of the common duct. In all doubtful cases of differentiation between duodenal ulcer, pyloric ulcer and gallstones, they recommended making an incision through the right rectus muscle one inch to the right of the median line. Gastroenterostomy best met the indications, in that it diverted the gastric contents. In acute perforation, suture was recommended, with suprapubic drainage, with after-treatment, and exaggerated Fowler's position, sitting posture. The 46 cases were divided into five groups. (1) Acute perforation of chronic ulcer, 4 cases, 2 deaths. (2) Acute hemorrhage in chronic ulcer, 1 case, 1 death. (3) Duodenal ulcer with gastric complications, 25 cases, 1 death. (4) Duodenal ulcer, with gall-bladder and liver complications, usually due to adhesions from chronic perityphlitis, 9 cases, one re-operation, no deaths. (5) Eight cases, chronic pain and distress with debility, no deaths. Total, 47 operations, 46 cases. Five operations for acute conditions, with 2 deaths; forty-two operations for chronic conditions, with 1 death.

DISCUSSION.

DR. E. WYLLYS ANDREWS, Chicago, had seen several cases in which marked hyperplasia, patches of exudate, with thickening of the wall of the duodenum, ulceration of the first inch and a half of the duodenum connected with a similar condition of the pylorus, had produced such a degree of thickening that clinically at the time of operation it was indistinguishable from carcinoma. In one such case the operation, which was a McGraw elastic ligature gastroenterostomy, left him in a dissatisfied state of mind, as he feared he should have done a more radical operation, and yet when operating for obstruction a year later he found absolute disappearance of the thickened massive wall, which had formed in the first place, and simulated carcinoma.

DR. JOHN B. MURPHY, Chicago, said the practical lesson taught by the paper was the frequency of occurrence of ulcer of the duodenum, which was not recognized, and was not differentiated from gastric ulcer or gall bladder disease, whether it was of infective or of stone origin.

DR. ALEXANDER HUGH FERGUSON, Chicago, asked Dr. Mayo in what class of cases he would do posterior gastroenterostomy, and in what class he would do gastrojejunostomy.

DR. MAYO said that they had never tried to excise any of these ulcers excepting by gastrojejunostomy. They were irregular and thick; they led to large vessels close to the common duct, and it was difficult to get a good stump. He thought the best thing to do was to make a gastroenterostomy, which would afford at least temporary relief, but the gastroenterostomy opening was very likely to contract, so that food would after a time continue to pass down over the duodenal ulcerated surface, and sometimes these patients would return for a second operation.

Certain Unavoidable Post-Operative Calamities in Abdominal Surgery.

DR. MAURICE H. RICHARDSON, Boston, read a paper considering four classes of calamities: (1) Suppression of urine; (2) inexplicable deaths, with symptoms of local and general sepsis, but without any detectable bacterial source; (3) uncontrollable capillary hemorrhage; and (4) pulmonary embolism. Suppression of urine could be regarded as an unavoidable accident only when it took place after the urine had been shown to be normal. The influence of ether alone was not regarded as sufficient cause. Suppression was doubtless due to some pathologic change in the secreting substance, or a tendency to glomerular irritation or renal inflammation, but a change or tendency which could not be detected beforehand. Such suppression of urine, however, might be prevented by the avoidance of all but imperative operations whenever there was the least evidence of renal disease, especially in insufficiency in the elimination of urea. Uncontrollable capillary oozing might be regarded as unavoidable only when it took place after careful examination of the blood with reference to its coagulability, etc. Capillary hemorrhage from jaundice could be regarded as

uncontrollable only when operation was performed in spite of the evidence of the tendency to hemorrhage. The coagulation tumor did not reasonably assure safety against bleeding, even if it was shown experimentally to be brief. His last case of fatal hemorrhage in jaundice took place from the capillaries of the lesser curvature of the stomach, remote from the operation area, though the blood coagulation tumor was perfectly satisfactory. In another case, a fatal and uncontrollable capillary oozing followed an operation on the common duct after a year of biliary fistula. In this case no bile had entered the intestine during the existence of the biliary fistula. The most frequent of such rare calamities was sudden death from pulmonary embolism. It could be neither predicted nor prevented. It occurred with no peritonitis. The probability of embolism being the result of a phlebitis was considered. In his experience, in a considerable number of deaths there were no premonitory symptoms whatsoever, while in cases of phlebitis, definite and unmistakable, no such accident occurred. Pulmonary embolism had been observed most frequently after pelvic operations on women with large uterine or ovarian tumors, and especially in women long exsanguinated by fibroids.

Papillary Cysts and Papillary Tumors of the Ovaries, with Consideration of Prognosis and Treatment.

PROF. SAMUEL POZZI, Paris, France, said that papillary tumors of the ovary, cystic or solid, must not be considered as always malignant. Some never undergo malignant degeneration, and do not relapse after removal. Some relapse after a long time, and locally without metastases. A careful distinction must be made between carcinomatous generalization through the lymphatics and blood vessels, and simple grafts from contact or from the growing over the peritoneum of detached papillary vegetations of the ovary. This process is benign and may be compared to the grafting of papillomas and warts of the skin. Some of these tumors undergo a malignant degeneration, which is for some time limited, but may later extend all over the mass, and which at last brings on a real generalization with cancer metastases. At the outset of the malignant transformation, it is impossible to discern it with the naked eye, and microscopic investigations are needed. The prognosis is uncertain before a thorough pathologic examination. Even such examination may lead to misinterpretation, if it has not been carried all over the tumor, for the degeneration may be limited to a small part of the growth.

When positive symptoms of malignancy are absent, such as cancerous cachexia or visceral metastases, operators must always treat these tumors as if they were benign, and proceed to remove the neoplasm to the largest extent possible. The disseminated growths or even small parts of the papillary tumor detached and lost in the peritoneal cavity may disappear. In other cases they may be the origin of local recurrence, which can be treated successfully by secondary operations. Frequency of successive invasion of both ovaries by papillary tumors furnishes an indication to remove the adnexa on both sides, even if one is still healthy, at least in women who are near the menopause. In young women it would be better to preserve a non-diseased ovary. In bilateral papillary tumors the operative technic can be greatly improved by performing partial or total hysterectomy, according to the case.

Drainage is not necessary when the cysts have no outside vegetations, and when there is no ascites. In case ascites exists, it is well to drain the peritoneal cavity. Incomplete removal, or even an exploratory section, in inoperable cases, is often accompanied by a real diminution of ascites, with local and general improvement.

Ankylosis Treated by Arthroplasty, Clinical and Experimental.

DR. JOHN B. MURPHY, Chicago, mentioned three types of ankylosis—ankylosis from periarthritis, ankylosis from capsular lesions and bony ankylosis. He said that bony ankylosis could be relieved. Tissue could be interposed to prevent the re-establishment of bony union, and a joint could be produced with a serous secreting surface. His experimental work had shown that after the removal of the hip joint in a dog, cartilage, synovial membrane, and the articular surfaces in their entirety, with replacement of tissue in the acetabulum and replacement of bone again, he had produced a typical synovial membrane in the sense of a hygroma. In the production of hygroma, pressure on fatty tissue had a tendency to bring about a coalescence of the small fatty capsules. The shaft of these capsules produced a serous secretion, and there was developed a condition which was seen in housemaid's knee, over the trochanter of the boilermaker, and over the wrist of the stonecutter. This could be done in a joint. The surgeon could restore joints to practically their normal condition.

Dr. Murphy reported a case in which a bullet perforated the intestine eight times, fractured the head of the femur, remained in a pocket for a time, ulcerated out, and was finally voided through the intestine. The patient recovered with a sinus, and with ankylosis of the leg at right angles. After removing the head of the femur, curetting and removing the bony débris from the ilium, the wound was allowed to heal, and a plan was devised for the restoration of the joint and the relief of deformity. He decided that it was necessary, first, to expose the joint and to secure bony tissue for the new head. Second, it was necessary to interpose between the fragments not only muscle, but fascia, covered with fatty tissue, because the fatty tissue here, subject to pressure, like the fascia lata of the trochanter, formed hygromata. A U-shaped flap was made, carrying with it fascia lata and all the superficial tissue of the skin, and then the joint sawed from around the trochanter major. None of the muscles was divided. A fracture was produced at the base of the cavity, and the head, which was new bone formation, as the original head was removed, was thrown out in connection with the neck, rounded off with bone-cutting forceps, and the curette was used to enlarge the cavity. The next step was to separate the fascia lata with its fat and a few fibers of the gluteus muscle; a flap was swung in behind the muscular attachments, and the trochanter major put in around the head of the femur and sewed to the neck. The neck was made short to prevent reunion of the fibrous portion of the capsule which remained, because, if the capsule remained in its fixed position, the ankylosis would continue, and this was one of the practical points derived from this particular case. The trochanter major was sutured to the neck, the head replaced, the trochanter major rounded off, the flap turned down, and the wound drained. The result was ideal. Dr. Murphy mentioned other cases on which he had operated by this method with gratifying results.

New Aids in Diagnosis of Surgical Diseases of the Kidney.

DR. A. T. CABOT, Boston, concluded that segregation of the urines was of great use sometimes in deciding which kidney was diseased, or most affected. Determination of the functional capacity of the kidney, by testing the elimination through it, might be of assistance by adding strength to what evidence we had, but would be often misleading if too implicitly relied on for deciding operative measures.

A Case of Acute Pancreatitis Associated with Gallstones.

DR. JAMES BELL, Montreal, said that the demonstrated facts in this case were: (1) In March, 1898, there were all the characteristic lesions, signs and symptoms of acute pancreatitis, and at the same time an apparently healthy liver and gall passage, with two or three stones in the gall bladder. (2) All signs and symptoms of pancreatitis disappeared and the patient recovered; but two years later characteristic symptoms of gallstones developed. (3) Three years after the attack of acute pancreatitis it was demonstrated that, while extensive and serious pathologic changes had taken place in the gall-bladder and bile ducts, all local signs of acute pancreatitis had entirely disappeared (subperitoneal fat necrosis and swelling of the pancreas). Acute pancreatitis, therefore, developed before there were any pathologic changes in the gall bladder and bile ducts, and while such changes were taking place pancreatitis was recovered from. These facts seem to be at variance with modern views of the etiology of acute pancreatitis, which attribute this condition, in a general way, to pathologic change in the common bile duct due to the passage of gallstones from the gall bladder to the intestine.

Treatment of Congenital Cleft Palate; A Plea for Operations in Early Infancy.

DR. TRUMAN W. BROPHY, Chicago, urged that the most desirable time to select for operating was within three months after birth. Thus one was able to secure more satisfactory results than later in life, and to avoid the objections usually raised. His experience in operating, at from ten days to fifty years of age, had more and more justified the early operation.

Among the advantages mentioned were: Less surgical shock, because the nervous system of the young child is not well developed, and it is not capable of receiving the same impressions that it would late in life. Better reaction in young children. Less alarm and dread, which are among the most powerful factors in producing shock. Less deformity, for all the tissues, bony as well as soft, develop naturally and according to accepted types. Possibility of development so that normal speech may follow when the child reaches a speaking age.

Dr. Brophy described his method of operating on cleft palate in detail. He stated that if operations were made later in life the patient should be placed under the instruction of one who had the perseverance, ability and patience to teach him how to overcome the defective speech which he had acquired.

A Mechanical Device for Gastric and Intestinal Anastomosis.

DR. F. B. HARRINGTON, Boston, described a ring for intestinal anastomosis for which he claims safety and speed, a complete resection and suture being easily done in fifteen minutes; cleanliness; assisted by clamps, the purse-string sutures prevent even a mucous ooze; the intestinal suture is more easily done over the ring than without it; a single layer of continuous stitches may be used, since the ring allows a perfect approximation to be made, and protects the suture until adhesions have formed; it is not necessary to sew up any of the layers, repair being more rapid when the mucous membrane is not sutured; the presence of the ring guarantees a free opening at the site of operation; in case the continuous stitch should be improperly applied, the weak spots are protected by the ring; after operation the ring holds the suture immovable and acts like a splint.

DISCUSSION.

DR. J. W. DRAPER MAURY, New York City, stated that instead of using the elastic ligature at the laboratory of Columbia University, they had been employing twine. The method of introducing the twine might follow the McGraw technic, although the triangular stitch possessed a distinct advantage over it. This stitch punched out as much tissue as might have been included in the triangle. It would cut through in less than three and a half days. It must be very tightly tied. This was the sole requirement to success.

The Subtle Force of Radium.

DR. ROBERT ABBE, New York City, narrated his experience, and said that radium had a powerful effect on carcinoma. The agent had been used in cases of lupus, superficial epitheliomata, carcinoma, rodent ulcer, superficial sarcomas, etc. In some cases of superficial recurrent carcinoma of the breast, if radium was applied to the diseased area for a considerable time, say an hour, then the patient permitted to go, and the agent reapplied at intervals of two or three days, the carcinomatous masses would disappear. In other instances, they would disappear under the use of the *x*-ray. Radium had an extraordinary power in inhibiting the growth of malignant cells in some cases.

DISCUSSION.

DR. W. W. KEEN, Philadelphia, said that one positive fact was worth a dozen negative ones. He had had an experience now covering twenty-two cases in which radium was used. Whether his results were due to the quality of radium, to a difference in the character of the growths, to the method of using it, or what not, he did not know; but in not one single case had there been the slightest benefit, except in one feature, and that was as to pain. Unquestionably, in cases of carcinoma the patients had suffered less, and in a large number pain had disappeared. He had used the German instead of the French radium. Some of his specimens had varied from 17,000 radio-activity up to a larger radio-activity, until finally he was able to obtain one specimen with 1,800,000 radio-activity.

Gastrostomy in Esophageal Stricture.

DR. JAMES H. DUNN, Minneapolis, said that cicatricial stricture was the most serious benign affection of the esophagus. He referred to the improvements in operative technic, saying that surgeons could now approach these cases with a very safe and certain method. He described the steps of the operation. A modification of Dunham's wire and spindle bougies was suggested as somewhat simpler and more handy. He had not found it necessary to use guards to protect the epiglottis and stomach fistula from chafing. By this plan but one anesthesia was necessary in each case. The fistula had not leaked and had healed spontaneously. He reported three very severe cases, one in a girl aged 19, following typhoid ulceration, and two in children, aged 9 and 2 years, from the ingestion of concentrated lye. Repeated attempts had failed to reach the stomach through the mouth in all these cases.

Surgery of Nerves; The Bridging of Nerve Defects.

DR. CHARLES A. POWERS, Denver, reported in detail a case of transplantation of four inches of the great sciatic of a dog to the external popliteal of a man. Union was prompt. The fragments stayed in place, and the immediate results seemed to be encouraging, but the ultimate result was a total failure. Examination and report were made eight years after operation. Cases of the bridging of nerve defects gathered from literature showed the following number: Grafting, 22; flap operations, 11; implantations (anastomosis), 10; resection of bone, 7; suture à distance, 3; tubulization, 1. Analysis of these cases showed that grafting was a failure and should be discarded, while the results in flap operations and anastomosis were about the same, something over 50 per cent. of the cases being successful.

Final Results in Secondary Suture of Nerves.

DR. EMMET RIXFORD, San Francisco, reported three cases of secondary nerve suture, of the ulnar at the wrist, of the musculospiral and the facial at the stylomastoid foramen, six, four and two years respectively after operation. In the first case the atrophic thenar, hypothenar and interosseous muscles regained their normal volume and function, save in so far as motion of the fingers was limited by adhesions, the result of fixation and chronic arthritis. In the second case the musculospiral nerve was sutured eight weeks after rupture complicating a fracture of the humerus. A defect of three centimeters was overcome by shortening the humerus that amount, and the result was complete motor and sensory restoration of function, with slight atrophy, one-half centimeter difference in circumference in the forearms. In the third case the facial nerve was severed by a narrow tooth beneath the mastoid process. Facial paralysis was complete. The suture was done at eight weeks after the injury. In order to secure tissue for the suture, the mastoid process was cut away with the surgical engine, and the external wall of the fallopian canal removed for five or six millimeters. Result: Face symmetrical when in repose; eye closes in sleep; may be closed at will; angle of mouth, tip of nose and chin can be drawn to the paralyzed side.

The prognosis in secondary suture was but little, if at all, inferior to the prognosis in primary suture. In the presence of infection secondary suture was preferable to primary. All scar tissue should be removed, including the whole of the terminal neuroma of central segment, the nerve ends united by absorbable suture with the least possible traumatism. Defects, if not too great, could be overcome by stretching, which should be done before section of the nerve ends or by shortening of the bone.

Thyroidectomy for Exophthalmic Goiter, with Report of 40 Cases from 128 Operations on the Thyroid.

DR. CHARLES H. MAYO, Rochester, Minn., said the subject of goiter was still unsettled both as regards etiology and treatment. Recent investigations concerning the lymphatic system

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and ductless glands rendered the subject very interesting at this time. Exophthalmic goiter was a distinct type, with many symptoms, involving the mental, muscular, digestive and circulatory function, the most common being the tachycardia without other cause. While the mortality was comparatively high, it was among those cases which had run the gauntlet of most known remedies for the disease, and should not be entirely laid at the surgeon's door.

The surgical methods were exothyropexy, ligation of the thyroid arteries, removal of the cervical sympathetic ganglia, thyroidectomy, and the physiologic effect of operations on other regions. He and his brother had operated on 130 goiters; 40 were of the exophthalmic type, and of these 6 died as the result of the operation. In the first 15 there were 4 deaths due to lack of judgment in accepting almost moribund cases. There were but two deaths in the last 25 cases. Very severe cases were subjected to *x*-ray exposures, and belladonna given internally for a few days or weeks previous to operation. Their cases showed marked improvement in all who survived the operation. Of these, 50 per cent. made a very early recovery, especially of the severe symptoms, such as tachycardia, nervousness and tremor; 25 per cent. did so after several months, and 25 per cent. were improved, yet suffered from irregular recurrence of some of the major symptoms.

Gallstones in the Common Bile Duct.

DR. S. H. WEEKS, Portland, Me., stated that impaction of a gallstone in the common duct rarely caused marked distension of the gall bladder; it caused dilatation of the branches of the hepatic duct, and might result in pronounced and even fatal jaundice. Obstruction of the common duct was always accompanied by jaundice, which was intermittent or remittent where the calculus floated in an enlargement of the common duct, because the system would eliminate the coloring matter of the bile in the interval. The cystic duct might be occluded and give rise to grave symptoms without there being any trace of jaundice or history of biliary colic. Jaundice with distended gall bladder not due to gallstones was presumptive evidence of malignant disease. Jaundice without distended gall bladder favored the diagnosis of cholelithiasis.

Dr. A. F. Jonas, Omaha, read a paper on "Primary Splenomegaly, Accessory Spleens, Splenectomy." Dr. S. J. Mixter, Boston, reported a case in which he removed the upper jaw for extensive osteosarcoma, with an excellent result, considering the formidability of the operation. Dr. Rudolph Matas, New Orleans, exhibited a new interdental splint which he had recently devised for the treatment of fractures of the jaw, particularly of the lower jaw, without bandages. Dr. Alexander Hugh Ferguson, Chicago, exhibited a patient on whom he had performed renal decapsulation for chronic interstitial nephritis three and a half months ago, with an excellent result. Dr. George B. Johnston, Richmond, Va., reported seven cases of complete removal of the shaft of the tibia, with restoration of the bone. Dr. J. E. Mears, Philadelphia, read a paper on "The Evolution of Surgery." Dr. Leonard Freeman reported a case of primary carcinoma of the liver.

NATIONAL ASSOCIATION FOR THE STUDY AND PREVENTION OF TUBERCULOSIS.

Organized at Atlantic City, June 6, 1904.

The constitution and by-laws of this new society were adopted June 6, at Atlantic City. The objects of the organization, as stated in its constitution, are as follows:

(a) The study of tuberculosis in all its forms and relations. (b) The dissemination of knowledge about the causes, treatment and prevention of tuberculosis. (c) The encouragement of the prevention and scientific treatment of tuberculosis.

The Officers.

The following are the officers: Dr. Edward L. Trudeau, Saranac Lake, N. Y., president; Drs. William Osler, Baltimore, Hermann M. Biggs, New York, vice-presidents; Dr. George M. Sternberg, Washington, D. C., treasurer; Dr. Henry Barton Jacobs, Baltimore, secretary. The board of directors, in addition to the officers above named, consists of Dr. Norman Bridge, California; Dr. S. E. Solly, Colorado; Dr. John P. G. Foster, Connecticut; Drs. Arnold C. Klebs and Robert H. Babcock, Illinois; Dr. J. N. Hurty, Indiana; Drs. William H. Welch, William Osler and John S. Fulton, Maryland; Dr. Henry M. Bracken, Minnesota; Dr. William Porter, Missouri; Drs. Edward O. Otis and Vincent Y. Bowditch, Massachusetts; Dr. Frederick L. Hoffman, New Jersey; Dr. S. A. Knopf and Mr. Edward T. Devine of New York; Dr. Charles L. Minor, North Carolina; Dr. Charles O. Probst, Ohio; Drs. Lawrence F. Flick, Mazyk P. Ravenel, H. S. Anders and Leonard Pearson, Pennsylvania; Dr. M. M. Smith, Texas; Dr. George E. Bushnell, of the United States Army Hospital, and Surgeon General Walter Wyman, of the United States Marine Hospital.

Membership.

Its membership is to consist of three classes: (a) Members—Those who are elected by the board of directors and who pay annual membership dues of $5. (b) Life Members—Those who pay $200 and are already members. (c) Honorary Members—Persons distinguished for original researches relating to tuberculosis, eminent as sanitarians, or as philanthropists who have given material aid in the study and prevention of tuberculosis.

The Management.

The government of the association, the planning of work, the arrangement for meetings and congresses, and everything that appertains to legislation and direction are to be in the hands of the board of directors, and committees are to have the power to execute only what is directed by the board.

The board of directors is empowered, however, to appoint an executive committee of seven members to which is entrusted the executive work of the association. This committee, chosen at the meeting in Atlantic City, consists of Drs. Trudeau, Jacobs, Otis, Ravenel, Klebs, Hurty and Mr. Devine.

The board of directors is empowered to appoint representatives in the International Committee on Tuberculosis. It was decided at the meeting of the organization that this representation was to be headed by Dr. William Osler and his associates will be selected later. The board is authorized also to appoint such committees as may be necessary for scientific and educational work, and for the holding of meetings and congresses.

Drs. Osler, Trudeau, Biggs, Devine, Barrier, Huber, Knopf and others made addresses, which were received with enthusiastic applause, and an ovation was given Dr. Trudeau when he appeared on the platform. Dr. J. M. Barrier of Delhi, La., in speaking of the fearful mortality from tuberculosis among the negroes, urged the new society to take up the work of prevention of tuberculosis among the negroes of the United States.

AMERICAN GASTROENTEROLOGICAL ASSOCIATION.

Annual Meeting, held at Atlantic City, June 6 and 7, 1904.

A symposium on "Gastric Ulcer" was the chief topic of the proceedings. Dr. Harlow Brooks, New York City, discussed the pathologic anatomy, and Dr. W. G. MacCallum, Baltimore, the pathogenesis. Dr. Campbell Howard (from Dr. Osler's clinic) analyzed the postmortem and clinical statistics of many hospitals in the United States and Canada. Symptomatology, course, complication, sequelæ and differential diagnosis were discussed by Drs. M. Einhorn, J. Kaufmann, M. Manges, all of New York City, and H. W. Bettmann, Cincinnati. Medical and surgical treatment were discussed by Drs. S. W. Lambert and J. A. Blake, New York City; the condition of the blood and urine was discussed by Dr. T. Futcher, Baltimore, and the occurrence of gastric ulcer in children by F. G. Cutler, Boston.

The New Officers.

The following officers were elected for the coming year: President, Dr. S. J. Meltzer, New York City; vice-presidents, Drs. F. H. Murdoch, Pittsburg, and H. W. Bettmann, Cincinnati; secretary, Dr. C. D. Aaron, Detroit.

The next meeting will take place in New York during the Easter vacation.

(To be continued.)

CONFERENCE OF STATE AND PROVINCIAL BOARDS OF HEALTH OF NORTH AMERICA.

Nineteenth Annual Meeting, held in Washington, D. C., June 3-4, 1904.

Report on Disinfectants.

DR. JOHN S. FULTON, Baltimore, submitted the report of the committee appointed to investigate and report as to an approved disinfectant to be used by licensed embalmers when transporting bodies. The reports recommended the use of bichlorid of mercury, 1 to 1,000, and formaldehyd 10 per cent. solution, for use on the exterior of the body and wrappings. The report of the committee was adopted, and the committee continued for a further report at the next annual meeting.

Other Committee Reports.

The committee, which had under consideration the question of affiliation with the American Medical Association, reported adversely, and the report was adopted.

DR. C. E. COOPER, Denver, Colo., introduced a resolution recommending the disinfection of railway cars and their contents by air-pressure. The resolution was freely discussed, then referred to a committee to report at the next annual meeting of the conference.

DR. HOLTON presented the report of the committee which was appointed at the Baltimore meeting to consider the best means of controlling the spread of venereal diseases. The committee prepared a leaflet containing instructions for the patient, which it recommended should be widely distributed. The report of the committee was adopted, and the committee on venereal diseases was continued with the request that everything possible be done to further the work.

New Officers.

The officers elected for the ensuing year are: President, Dr. John S. Fulton, Baltimore; vice-president, Dr. M. K. Foster, San Francisco; treasurer, Dr. J. A. Egan, Springfield; secretary, Dr. Gardner T. Swarts, Providence, R. I.

Therapeutics.

[Our readers are invited to send favorite prescriptions or outlines of treatment, such as have been tried and found useful, for publication in these columns. The writer's name must be attached, but it will be published or omitted as he may prefer. It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in everyday practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns without allusion to inquirer.]

Pneumonia.

Thornton, in *Amer. Med.*, states that pneumonia presents different aspects and problems to be met as it appears in infancy, adolescence, in the aged, the robust, plethoric, anemic, nervous, debilitated and alcoholic; different questions arise at the various stages; the course is modified by climate, altitude and locality. But since the same essential pathologic process is seen in all cases, there must be certain principles of treatment applicable to all cases.

HYGIENIC TREATMENT.

The general treatment is to conserve the strength and prevent unnecessary respiratory effort. Thornton advises a firm bed, condemns the use of feather beds, advocates the use of the bedpan, urinal, and feeding cup in order to avoid all possible muscular effort; to further insure quiet for the patient no one is allowed in the room except those in attendance. He thinks some patients have actually been "talked to death."

The temperature of the room should be maintained at from 65 to 70 degrees, and the air must be pure and moist.

LOCAL APPLICATIONS TO THE CHEST.

Poultices are good only in the stage of congestion, when they may relieve pain by the heat and moisture they contain; later, rest is interfered with by the necessary frequent changing, and they can have no effect on the consolidated area. A smart mustard plaster may be applied and left until the surface becomes red and the heat maintained by a hot-water bag or a thin cotton jacket.

MEDICINAL TREATMENT.

Medicinal treatment must be directed to combat toxemia by free elimination; an initial calomel and saline purge, followed by copious drafts of water and salines as required. When rest and quiet are disturbed by cough, delirium, and sleeplessness, drugs must be used to restore rest. For the pain morphin gr. 1/6 (1 eg.) by mouth or hypodermically, repeated if required after several hours. Codein is recommended as a general sedative to the nervous system and the respiratory mucous membrane, is well borne by children, and does not lock up the secretions. It is best given in small doses, gr. 1/12 to 1/6 (5 to 16 mg.), every three hours for adults; in children the dose is gr. 1/60 to 1/12, depending on the age and condition.

Aconitin and veratrin may be given in the early stages of the sthenic cases and the author says they are useful in quieting the circulation, thus saving the heart; reducing the temperature, thereby lessening tissue waste. Medicinal doses do not depress the heart.

Digitalis and strychnia are indicated at the time of and after the crisis, when the right ventricle is dilating and losing ground because of the resistance in the lungs. The author recommends the active principles of the drugs in preference to the uncertain tinctures and fluid extracts. Specific treatment by serotherapy has not been found, but creasote or creasote carbonate have given very satisfactory results; if given before the stage of complete consolidation the temperature falls, and in 48 hours convalescence is begun; when given after the lung is already consolidated the symptoms are ameliorated and the temperature falls gradually. The drug must be continued during convalescence. Creasote is best administered in the form of enteric pills to avoid gastric irritation, the dose is gr. 1 to 2 (.065 gm. to .13 gm.) every three hours. Creasote carbonate is a brown syrupy liquid, and may be given in an emulsion with acacia or cinnamon water; in this form it does not have a bad taste. Dose 10 m. (6 c.c.) every three hours. Care should be taken by the nurse to arrange the medicine and nourishment and other details to come about the same hour so that the patient may be less frequently disturbed.

CALOMEL TREATMENT.

John T. DeMund, in a communication, writes: "I am of the opinion that heretofore more if not all physicians have overlooked the all-important bearing of the "Portal Circulation" in inflammation of the lungs. In active practice for the last forty years, the last ten of which I have been in the habit of using boldly and most successfully calomel in heroic doses, adult dose gr. x every four to six hours, day and night p. r. n. The microbic bed of morbidity and mortality is freed from its pulmonic environment, and as seven-tenths of the disease is eliminated in twenty-four to forty-eight hours, the remaining three-tenths is treated better by careful nursing than by overzealous doctoring. I write from experience."

POTASSIUM IODID TREATMENT.

Altshul, in the *Med. Rec.*, reports 250 cases of lobar pneumonia treated with potassium iodid with a mortality of only 1 per cent. The drug is given in doses of gr. x-xv (.6-1 gm.) and repeated every two or three hours, increasing the dose by five or ten grains each time according to the severity of the case. He states that 1,000 to 3,000 grs. (66 to 200 gm.) may be administered without unpleasant results, the condition of the heart's action being the index as to toleration. The disease is not shortened but always runs a mild course and terminates by lysis.

N. S. Davis recommends the following to insure rest and elimination:

℞.	Pulv. opii et ipecacuhanæ .....gr. v	30
	Pulv. camphoræ .....gr. ii	12
	Hydrarg. chloridi mitis .....gr. i	06

M. Ft. chart. No. i. Sig.: Give at night to favor sleep, followed by a rectal enema each morning.

If the cough is frequent and the expectoration difficult the following combination gives almost uniformly good results:

℞. Ammon. hydrochloratis ..... ʒiv 15
Antimonii et potassii tartratis ..... gr. ii 12
Morphin. sulphatis ..... gr. iii 20
Glycyrrhizæ syrupi ..... ʒiv 120

M. Sig.: One teaspoonful every three or four hours.

If during the second stage the expectoration becomes more purulent and the systole of the heart weaker carbonate of ammonium and pulverized gum camphor may be substituted for the above mixture.

Bronchopneumonia.

Northrup, in the *Medical News*, thus summarizes how to cure the baby of bronchopneumonia: 1. Castor oil to clear the field of operation. It is the first aid to the injured. 2. Fresh air, cool and flowing. The red blood stimulates the heart, improves the digestion, quiets restlessness, aids against toxemia. Regulate the temperature of the air of the room inversely to that of the child. The patient's feet must always be warm, and the head cool. 3. Water plenty, inside and outside, temperature indicated by the child's temperature. 4. Quiet and rest, tranquillizing influences about the patient, undisturbed sleep. 5. Correct feeding to avoid fermentation of gas in the abdomen. If there is need, high hot salines. 6. Antipyretics; use water, no coal-tar products. 7. Heart stimulants, fresh air, hot foot baths. Relieve tympanites. Hot foot baths and hot salines can be given in a cold room; both can be given under the bedclothes. Drugs: whiskey and strychnin. These are the first drugs mentioned in the paper.

Chilblains.

The *Jour. de Méd. de Paris* recommends the following:

℞. Salol
Ether, āā ..... ʒi 4
Flexible collodion ..... ʒi 30

M. Sig.: Apply as required.

Infantile Convulsions.

Jacobi recommends the following prescription for infantile convulsions:

℞. Chloral hydratis ..... gr. iv 25
Potassii bromidi ..... gr. viii 50
Syrupi simplici
Aquæ destil., āā ..... ʒi 4

M. Sig.: One dose for child two years old.

Hemoptysis.

Pepper recommends the following formula:

℞. Acidi gallici ..... ʒii 8
Acidi sulph. arom. ..... ʒi 4
Glycerinæ ..... ʒi 30
Aquæ destil., q. s. ad ..... ʒvi 180

Gingivitis.

In inflammation of the gums Bjorkmann, in *Merck's Archives*, recommends the following combinations:

℞. Tinct. catechu
Tinct. myrrhæ
Tinct. arom., āā ..... gtt. lxxv 5
Olei menth. pip.
Olei anisi, āā ..... gtt. viii 50
Spts. diluti ..... ʒiii 90

M. Sig.: One teaspoonful in a glass of water to cleanse the buccal cavity several times a day; or:

℞. Thymol ..... gr. iv 25
Acidi benzoici ..... gr. lxxv 5
Tinct. eucalypti ..... ʒss 15
Olei menth. pip. ..... gtt. xv 1
Elix. simp. q. s. ad ..... ʒiii 90

M. Sig.: One teaspoonful in a glass of water as a mouth cleanser; or:

℞. Tinct. krameriæ
Tinct. myrrhæ
Tinct. gallæ, āā ..... m. lxxv 5

M. Sig.: Apply locally to the affected places several times a day; or:

℞. Salol ..... gr. xxiiss 1 50
Spts. menth. pip. ..... ʒi 30
Tinct. catechu ..... ʒii 60

M. Sig.: One teaspoonful in half a glass of warm water as a mouth wash.

Administration of Antipyrin.

A. Martinet, in *Ther. Gazette*, states that antipyrin should never be given in capsule form, as it is very irritating to the gastric mucous membrane. It is generally so administered because it is cheaper, but in solution it is preferably prescribed. It is recommended given in combination with sodium bicarbonate as follows:

℞. Antipyrini ..... ʒss 2
Sodii bicarb. ..... ʒi 1
Syr. aurantii ..... ʒiii 12
Aq. destil. ..... ʒxii 48

M. Sig.: One tablespoonful as indicated.

Antipyrin should always be administered outside the period of digestion, that is half an hour before meals or one and a half hours after meals.

It is not advisable to administer it hypodermically, as it is liable to cause local disturbances. In epistaxis it is of service locally as a hemostatic applied in the following solution:

℞. Antipyrini ..... ʒii-x 8.-60
Aquæ ..... ʒxx 80

M. Sig.: To be applied locally with a swab. As an ointment in anal fissures it is recommended combined in the following proportions:

℞. Cocainæ hydrochlor ..... gr. viiss 50
Antipyrini
Zinci oxidi, āā ..... gr. xxx 2
Lanolini
Liq. petrolati, āā ..... ʒiiss 10

M. Ft. unguentum. Sig.: Apply locally.

Indications and Non-indications for Atropin.

A. Brav, in *Ther. Gaz.*, states that the salts of atropin being easily soluble in water are very suitable for ophthalmic practice. It is used as a mydriatic, antiphlogistic, analgesic, iridoplegic and cycloplegic. Its action is entirely local, as shown by the fact that atropin dropped in one eye will not produce dilatation in the other. For mydriatic purpose one drop of a half per cent. solution of the sulphate or salicylate will suffice. As a mydriatic it is indicated in all conditions where the iris is congested, as it acts directly on the terminal nerves of the iris, also in conditions where adhesions of the iris to the anterior part of the capsule of the lens exist. Its antiphlogistic power depends on the fact that it relieves the congestion of the iris by forcing the blood out of its vessels into the ciliary vessels, and thus relieves the inflammatory condition. It also places the iris at rest by paralyzing its motor function and thus prevents its movements in response to light stimulus, giving it rest, which is the most essential thing in inflammatory conditions. It diminishes pain, not in an anesthetic way, for it has no anesthetic properties, but simply by paralyzing the motor filaments and preventing movements of the iris.

The indications for the use of atropin may be summed up as follows:

1. In correcting errors of refraction.
2. In spasms of accommodation.
3. In hypermetropia producing convergent strabismus.
4. In the various inflammatory conditions.
5. In ulcers of the cornea.
6. In iritis, whether syphilitic, rheumatic or traumatic.
7. In diseases of the sclera, wounds and recent injuries.
8. In diseases of the uveal tract, choroiditis, retinitis, by paralyzing the ciliary muscle.
9. In circular iridodialysis.

It is non-indicated in:

1. Glaucoma.
2. In people over forty years of age atropin is not indicated to correct errors of refraction.
3. In cyclitis, atropin will increase the pain.
4. In ulcers of the cornea with impending perforations.
5. In radial iridodialysis.

It must be remembered that atropin sometimes causes toxic symptoms and some individuals show marked intolerance for it. Its poisonous effect from local use takes place by passing through the puncta, canaliculi, lacrimal sac, nasal duct to the mucous membrane, where it is absorbed. Consequently to prevent the poisoning from atropin it must be prevented from running into the nasal canal with the tears. To avoid this the

eyelid should be everted so as to allow any excess to run down the cheek. This is especially necessary when instilling it into the eyes of children. The preparation used should be neutral in character, not too strong. No more than three drops daily should be used, and in children one drop, and should not be used when the patient is past forty years.

Bronchial Asthma.

The following antispasmodic combinations are recommended by "Text-Book of Applied Ther." in the treatment of bronchial asthma:

R. Morphinæ valerianatis	gr. i	06
Elix. ammon. valeren.		
Spts. chloroformi, āā	ʒvi	24
Syr. tolutani q. s. ad	ʒii	60

M. Sig.: One teaspoonful every half hour until relief follows: or;

R. Tinct. belladonnæ	ʒi	4
Spts. chloroformi	ʒvi	24
Syr. altheæ q. s. ad	ʒii	60

M. Sig.: One teaspoonful every half hour as required.

Urticaria.

In strophulus infantum, which is a variety of urticaria occurring in infancy, M. Joseph, in *Ther. Review*, states that the treatment depends greatly on the diet as in ordinary urticaria. The proper kind of milk must be prescribed for young infants and older children should be forbidden to eat meat. To relieve the itching the following is recommended:

R. Liq. carbon. deturgens	gr. lxxv	5
Zinci oxidi		
Amyli, āā	ʒv	20
Glycerini	ʒi	30
Aquæ destil.	ʒiiiss	100

M. Sig.: Apply to the itching surfaces with a brush three times a day. A warm bath should be given twice weekly. If the foregoing does not relieve the symptoms he employs bromocoll (dibromtannin and calcium) in the form of a 10 or 20 per cent. ointment or euguform (a combination of formaldehyd and creosote) either of which may be substituted for the foregoing tar preparation. Internally he advises the following as an intestinal antiseptic:

R. Menthol	gr. xv	1
Ol. amygdalæ dulcis	gr. iv	25

M. Ft. cap. No. xxx (gelatin). Sig.: One capsule three times a day.

Brewer's yeast, a teaspoonful in milk once or twice daily, may be substituted.

In prurigo of infants the skin should be kept clean and the diet and digestion regulated. Internally intestinal antiseptics iodin and cod-liver oil or dilute sulphuric acid. Locally he advises emollient ointments or luguform.

Methylene Blue in Malaria.

Moore, in *Therapeutic Gazette*, gives the following conclusions as the result of his study of the use of methylene blue in malaria:

1. Methylene blue will destroy malarial parasites in many cases, but is less certain than quinin.

2. Methylene blue is probably most valuable in chronic cases, but has no advantage over quinin.

3. The effects of methylene blue are ordinarily more unpleasant than quinin.

4. It is useful in cases that can not take quinin on account of some idiosyncrasy to it. Its use in cases of pregnancy is undetermined.

5. It is probably valuable in the treatment of hematuric and hemoglobinuric fevers on account of diuretic action. This has yet to be determined. We have had no chance to test its use in such cases.

6. We believe quinin is quicker and much more certain, and would rely on it rather than on the methylene blue. Where there is a known idiosyncrasy to quinin, methylene blue, medicinally pure, should be given in doses of three to five grains every four to six hours in capsules, combined with gr. ½ pure nutmeg. Ordinarily, there will be no unpleasant features, but in some cases there is burning on micturition, and now and then nausea and headache. In neuralgia and neuritis of malarial origin, methylene blue is very valuable.

Medicolegal.

Damages for Loss of Thumb and Finger.—The Supreme Court of Minnesota holds, in the personal injury case of Bernier vs. the St. Paul Gaslight Company, that an award of $3,250 for the loss of the entire thumb of the left hand and the entire index finger of the right hand of a minor 20 years old was not excessive, but only fairly compensatory, the thumb of the left hand having been cut out of the palm.

Compensation for Attending Indigent Smallpox Patients.—The Court of Appeals of Kentucky says, in the case of Rutherford vs. Bath County and others, that the party suing, a practicing physician, was employed by the county judge and the county board of health to look after and treat indigent persons afflicted with smallpox in Bath county, and to prevent the spread of the disease. There was no contract fixing the amount of compensation therefor. He treated about 70 persons who were afflicted with the disease, and was engaged in the work for 92 days. He presented to the fiscal court of Bath county an itemized account for his services at the rate of $20 a day, aggregating $1,840. The fiscal court rejected all of this claim except $750, which was allowed, paid and credited thereon. The physician thereon appealed to the Bath Circuit Court, where a trial resulted in a verdict for the defendants. On the trial the physician introduced a number of reputable physicians who thought the charge of $20 a day reasonable, in view of the fact that he had been compelled during this period of time to give his entire attention to his smallpox patients; while, on the other hand, the county judge and a member of the board of health, who had employed him, both testified that $750 was ample compensation for the services which had been rendered. They also introduced several persons who had been treated by him for smallpox, one of whom testified that he did not come into his house at all while he was sick, and only passed his house on one occasion. Another testified that he came to see his family (five members of which had been afflicted with the smallpox) four times. The Court of Appeals holds that the testimony for the defendants was sufficient, if credited by the jury, to sustain a verdict, and that it (the Court of Appeals) had no power to control the judgment of the jury and say that they should have believed the testimony for the physician and rejected that for the defendants, or to set aside such a verdict because of a mere numerical superiority of witnesses on the side of the physician.

Hospital Records—Cross-Examination—Privilege.—In the case of Kemp vs. the Metropolitan Street Railway Co., brought by John Kemp, administrator of the estate of Annie Kemp, deceased, the First Appellate Division of the Supreme Court of New York says that a junior assistant surgeon connected with a hospital, and who had charge of an ambulance, testified that in answer to a call he took the said Annie Kemp to the hospital; that on his return to the hospital he entered in a book, which he produced, the name and address of the woman that he carried to the hospital; that he had no recollection of the occurrences apart from the entries in the book; that some of the other entries as to ambulance calls on that day were made by him and some by another physician who was not examined on the trial. The physician also testified that his diagnosis as contained in this entry was his opinion at the time, and that it was his opinion when he was examined as a witness; that he remembered such a name as that of Annie Kemp, but could not say positively that it was Annie Kemp. The court holds that the record of this book was clearly incompetent. It says that it was not a public record kept by a public officer in the discharge of his duties, but was the record of the fact that at a specified time the physician removed a person to the hospital, whose name and address were en-

tered in the record of the hospital, with a statement of the nature of her injuries. But even assuming that, while these records were incompetent, they could not have injured the street railway company sued, the company certainly was entitled to cross-examine the witness who made the entries in relation to them. This entry in the hospital book, which contained a statement of the accident and the injuries sustained by the woman that he took to the hospital, and which the physician obtained from her, having been introduced as evidence against the company, over the company's protest and exception, it was certainly competent then for the company to prove what it was that the woman said to him from which he made the record which had been admitted in evidence. A party to an action can not call a physician and accept his statement of a fact which he had recorded, knowledge of which he acquired from the party introducing the evidence, and then prevent his opponent from proving just what it was that the party said to the witness from which he made the record which contained the statement. Assuming that the communication of the woman to the witness was privileged—a question which is open to serious doubt since the decision in Green vs. Met. St. Ry Co., 171 N. Y. 203—the plaintiff, by calling the physician and interrogating him as to the condition of the woman after the accident, and introducing in evidence the record that he made in the hospital book of the occurrence, clearly waived the prohibition contained in section 834 of the New York Code of Civil Procedure; and the attorney for the representative of the now deceased woman, having interrogated the witness as to the condition of the woman, and having been allowed to introduce in evidence the record made by the physician of the information that he received from the woman at the time, could not claim that the witness should be prevented from stating to the jury the declarations made by the woman from which the record was made.

Malpractice—Treating Symptoms for Disorder—Damages.—The Supreme Court of Kansas says, in Manser vs. Collins, an action for malpractice brought by the latter, that it is true that a physician is required to possess a reasonable degree of learning and skill only, and the exercise of ordinary care and diligence will exempt him from liability, and that he is not responsible for errors of judgment in matters of reasonable doubt. At the same time it holds that a physician is answerable in damages for a failure to discover a serious dislocation of a patient's shoulder and fracture of an arm, when there was a reasonable opportunity for examination, and the dislocation and fracture could have been ascertained by the exercise of ordinary care. In this case, it says, the physician was one of 18 years' practice, which fact it was presumable that the patient knew when she called him. It was his duty to use reasonable care to ascertain the seat of his patient's trouble. It was to be expected that he would treat the disorder itself, and not the symptoms of it. For neglect to exercise reasonable skill in ascertaining the source of her distress he was held liable. There can be no doubt that physicians and surgeons in such cases must respond in damages if their carelessness results in injury to the patient. Mental suffering naturally attending and incident to physical pain, prolonged by the failure of a physician to discover the seat of a bodily injury, is a proper element of damage in such cases as a failure to discover a serious dislocation of a patient's shoulder and fracture of an arm as above mentioned when the same could have been ascertained by the exercise of ordinary care. It may be said that the failure of the physician to alleviate the patient's suffering was the cause of it, at least to the excess above a minimum, to which it might have been reduced after prompt discovery of the cause and by proper treatment. To that extent he caused her physical harm by a negligent omission to exercise reasonable skill. Where mental suffering is an element of physical pain, or a consequence of it, damages for such mental suffering may be recovered. Mental suffering, however, resulting from the injury, which arises in the mind, but is not a part of the pain naturally attendant on and connected with the injury, can not be regarded as an element of damage.

Current Medical Literature.

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

American Medicine, Philadelphia.

June 25.

1 *Some Remarks on the Treatment and After-treatment of Congenital Dislocations of the Hip. Adolf Lorenz.
2 *Surgery of Hydrocephalus. R. M. Ricketts.
3 Concerning the Embryology of Kidney Anomalies. A. G. Pohlman.
4 Two Cases of Fatal Poisoning (Criminal) by Strychnia, with a Report of the Toxicologic Examination of Some of the Organs. J. Morrison.
5 The Antiseptic Treatment of Smallpox. S. M. Wilson.
6 *Strangulated Femoral Hernia Containing the Vermiform Appendix. E. Marvel.

1. Treatment and After-Treatment of Congenital Dislocations of the Hip.—Lorenz discusses this subject, detailing at great length his method of after-treatment of congenital dislocations of the hip.

2. Surgery of Hydrocephalus.—Ricketts presents a historic review of the various measures instituted for the relief of hydrocephalus since 1744. He arrives at the following conclusions:

1. Excessive secretion of the cerebral meninges may occur in any form of animal life.
2. The various forms of vegetable life are subject to excessive local or general secretion to a fatal degree.
3. Hydrocephalus, ventricular or meningeal, may develop in utero or at any time throughout infant or adult life.
4. The cases of spontaneous recovery are probably numerous, especially in infant life, in which the arachnoid is alone involved.
5. All cavities may unite, with or without external rupture; when so, it is usually fatal, not necessarily instantly so.
6. Spontaneous rupture may occur externally or subcutaneously, with an occasional recovery.
7. The effusion may be into the lateral third or fifth ventricle, or it may be in the arachnoid or subarachnoid cavity, one or all.
8. A clot in the arachnoid cavity may cause a cyst which will enlarge, with all its consequences.
9. Syphilis, tuberculosis and rickets have been assigned as causes of hydrocephalus, but such have never been proved; the cause is yet unknown.
10. Sometimes zones of new osseous material are scattered here and there in the meninges, and sometimes on or in the brain substance.
11. The septum lucidum is invariably thickened, as are the cerebral meninges in general.
12. Probably the greater number of cases of early hydrocephalus, whether of the third, fourth, fifth or lateral ventricle, or of the arachnoid variety, can be cured by some form of drainage.
13. Continuous drainage by seton or the repeated use of the trocar has given the best results in the way of benefit or cure.
14. Spinal drainage has been practiced in a very limited degree, and its value is as yet undetermined.
15. Subcutaneous drainage has not resulted in a cure, but there seem to be many possibilities for this method.
16. Trephining for drainage is only resorted to in cases in which the fontanels have been closed by bony union.
17. Results from drainage are more favorable if done when the presence of fluid is first detected.
18. It is sometimes necessary to drain both hemispheres, together with the right and left cerebellar cavity.
19. The secret of curing arachnoid hydrocephalus by drainage probably lies in obliterating the arachnoid cavity. However, this can be done with hydrocephalus of the third, fourth and fifth ventricular variety.
20. The cardinal principle in this, as in all operations on the brain, is asepsis.

6. Strangulated Femoral Hernia Containing Vermiform Appendix.—Marvel reports a case of this kind occurring in a woman, aged 68. She first noticed a mass in the right groin about six years ago. Since then the mass came down frequently, but always could be replaced easily. She suffered considerably from abdominal pain, and on several occasions was obliged to go to bed for a few days. Her last attack was accompanied by great prostration, pain and vomiting. On examination, a mass the size of a hen's egg was found in the right groin, just beneath Poupart's ligament. The abdomen was rigid, and whenever she had the cramp-like pains a circumscribed mass the size of a double fist would form in the abdomen. This would disappear with the cramp to form again with the next cramp in another part of the abdomen. At the operation the hernial sac was found to contain the incarcerated bowel and the vermiform appendix, which was folded on the cecum and constricted at a level with the cecal constriction produced by the incarceration of the ring. The appendix was about seven inches long, enlarged at the tip, and contained a foreign substance. The meso-appendix, as well as the meso-cecum, was elongated and could be brought out

through the femoral canal with ease. The patient made an uneventful recovery.

Medical News, New York.

June 8.

7 *Management of Fever in Childhood. E. W. Murray.
8 *Two Cases of Paralysis of the Ulnar Nerve; One Following a Severe Attack of Typhoid Fever; the Other Caused by Pressure During Occupation. J. H. Lloyd.
9 *Apparatus for Nitrous Oxid-Ether Anesthesia. W. Van Hook.
10 A Brief Report of Four Years of Genitourinary Work in the Second Surgical Division of Mt. Sinai Hospital. H. Lilienthal.
11 *Vesical Retention of Urine. F. C. Valentine and T. M. Townsend.
12 The Danger of the Use of Opium in Infancy. T. D. Crothers.
13 Water Anesthesia in Surgery, and Its Suggestions in Medicine. J. Clements.
14 *A New Instrument; Amputation Shield. W. A. Sedwick.

7. **Management of Fever in Childhood.**—Murray considers the physiology and pathology of fever and insists on the necessity of analyzing the cause before any attempt is made at treatment. Each case is a law unto itself. As to the treatment, he says, that with high fever we should stimulate with alcohol, but with depression strychnin is useful. Phenacetin is preferable to antipyrin or acetanilid, possessing the unfavorable features of the last two to a lesser degree. The coal-tar products should be used only in high fevers of short duration. In young children and infants, where there is not much prostration, rectal irrigation is of value. Where there is great prostration the ice cap or the sheet pack may be employed. His method is as follows: Remove the clothing, dip the sheet in warm water, wrap carefully and smoothly about the child; over this apply a second sheet wrung out of cold water; institute gentle friction with the hands to prevent capillary engorgement. Cold water is applied as needed. Two symptoms should be kept in mind—the character of the breathing and the tendency to cyanosis. If either occur, remove the child from the pack and place between warm blankets. Ordinarily the application is continued from ten to fifteen minutes, at the end of which time the child is to be rubbed until the skin is dry and glowing. Where the fever has been complicated by convulsions, apply cold baths to the head, or use the water-bag for a pillow, after the child has been put to bed. If the temperature is dangerously high, nothing is so effectual or so likely to save life as emersion in a tub of cold water, cooled by the addition of ice. The diet should be regulated carefully and elimination favored. In ordinary fevers the food must be liquid and cool; in vomiting, cold; in respiratory diseases, warm; in collapse, hot. The best feeding time is the remission. When the evening rectal temperature is 100 degrees F., or above, give milk containing 2 per cent. fat, 1 per cent. proteid and 5 per cent. sugar. When the temperature is lower than this full-strength milk may be used. When the temperature is steadily below 100 degrees F., but above normal, give milk, bread and butter with the first, third and fifth meals, broth, dextrin and biscuit with the midday meal. When the evening temperature is steadily normal, give cereals and sterile cream with the first and fifth meals, and if well borne, add to the midday meal gradually, first starchy vegetables, milk puddings, green vegetables, then eggs, white meats and finally red meats. This is the dietary advocated by Dr. Coit for feeding children from 12 months to 2 years of age, who are suffering with fever. It is a very accurate and simple way in which to manage the diet.

8. **Paralysis of the Ulnar Nerve.**—Lloyd reports two cases of paralysis of the ulnar nerve, one following an attack of typhoid fever, marked by hyperpyrexia and extreme prostration with several alarming hemorrhages from the bowels. The lesion which involved the right ulnar nerve did not appear until some weeks after recovery. The second case was one of pressure palsy, due to the habit of leaning on the left forearm while writing. In both cases the findings were typical of this condition.

9. **Apparatus for Nitrous Oxid-Ether Anesthesia.**—Van Hook describes a new device, consisting of an attachment for an ordinary nitrous oxid face piece constructed so that the ether vapor can be substituted for the nitrous oxid gas at will. The article is illustrated with cuts showing the construction of the apparatus.

11. **Vesical Retention of Urine.**—Valentine and Townsend review in full the medical and surgical treatment for this condition, and summarize as follows:

(1) When danger to life is not imminent, the domestic methods ordinarily employed may relieve the vesical retention, provided no mechanical obstacle exists. (2) Diuretics, diluents and antispasmodics are of no use in vesical retention of urine. (3) Opiates and general anesthesia are useful only under certain circumstances. (4) Capital surgical intervention may be necessary to cure the basic condition, but the urgent symptoms can, in most instances, be relieved without life-endangering procedures. (5) Even the youngest general practitioner can carry every case of vesical retention of urine to a successful issue. (6) The cause of the retention must in each case be ascertained. (7) Only most exceptionally does a case present which can not be relieved by minor procedures. (8) No bladder should be suddenly entirely emptied because of danger of hemorrhage *ex vacuo*.

14. **An Amputation Shield.**—Sedwick describes an instrument for the protection of soft tissues when amputating. The shield consists of two concavo-convex blades containing two oval openings about the center for the reception of one or two long bones. The size of these openings can be regulated. The use of this shield obviates the necessity of having an assistant—although it is preferable to have one for other purposes—the use of retractors is done away with, the field of operation is unobstructed by instruments and the operation is hastened. The shield can be sterilized, it is easy of application and protects absolutely the soft tissues or flaps.

Medical Record, New York.

June 8.

15 *Myelopathic Albumosuria. (Kahler's Disease: Multiple Myeloma.) S. J. Meltzer.
16 *The Present Status of the Surgical Treatment of Chronic Bright's Disease. A. Berg.
17 A Few Words Concerning Radium. H. G. Piffard.
18 *Hydrocele of the Cord; Report of Cases. A. Jacoby.

15. **Myelopathic Albumosuria.**—The diagnostic points of this disease, says Meltzer, are pain in the bones, especially those of the trunk (because of the myelomatous tumor), the presence of Bence-Jones' albumose in the urine, and a more or less rapid decline, invariably leading to a fatal termination. A case in point is cited. The course of the disease is variable, from one to eight years. Death is caused by exhaustion or by an intercurrent affection. Efforts at treatment have proven unavailing. The albumose in the urine is tested for as follows:

Addition of nitric acid to some of the urine in a test-tube will cause a bulky precipitate, more bulky than a precipitate of albumin. This precipitate redissolves on being heated to the boiling temperature—coagulated albumin is not redissolved again by heat; on the contrary, it becomes more compact. When urine containing the Bence-Jones' albumose is heated up slowly it will be noticed that at a comparatively low temperature of about 130 F. the urine becomes turbid, and coagulates when heated only a little more. However, when the temperature approaches the boiling point the coagulum dissolves again to a great extent, the urine remaining only slightly turbid. When cooled, a heavy precipitate reappears, to disappear again on reheating the urine to the boiling point. It is characteristic for albumose to coagulate at a comparatively low temperature, redissolve at the boiling point, to precipitate when cooled, and dissolve again on heating. As in our routine work we never gauge the temperature, it is practical never to be satisfied with the appearance of a coagulum, but to wait until the urine starts to boil; we will thus never overlook the presence of an albumose. For the differential diagnosis between the Bence-Jones' albumose and the other albumose bodies, we may bear in mind the following points: It differs from the secondary albumoses (deuteroalbumoses) by being precipitated by copper sulphate or copper acetate. It differs from protoalbumose by being precipitated by sodium chlorid even in a neutral solution, which it has in common with heteroalbumose, with which it was, indeed, thought to be identical by many writers. Bence-Jones' albumose, however, differs from the heteroalbumose by not becoming precipitated by dialysis, or, still simpler, by remaining in solution even when considerably diluted with water. However, for practical purposes, it is sufficient to establish by the simple heat-tests that we have to deal with an albumose. The presence of a large quantity of albumose in the urine is, according to the present state of our experience, indicative of a malignant disease of the bone-marrow or of multiple myeloma.

16. **Decapsulation in Chronic Bright's Disease.**—Berg reviews the present status of the surgical treatment of chronic Bright's disease and cites a number of cases. Great stress is laid on the indications for the rational surgical or medical treatment of the disease, which, according to the author, are as follows: First, establish the cause of the nephritis, and so ascertain whether or not the case is fit for operation. Second, institute internal treatment, with restricted dietary and good hygiene, for a reasonable period of time. If improvement follows, continue the treatment; as soon as the patient reaches a stationary stage or gets worse, resort to operative treatment without delay. The author closes with a description of the surgical treatment.

18. Hydrocele of the Cord.—Jacoby discusses this condition and reports three cases. He divides the treatment into three classes: First, the use of the truss; second, removal of the fluid, with or without the injection of an irritant; third, the radical methods, (*a*) incision and drainage, (*b*) excision of the sac, (*c*) incision of the sac, everting it, and suture. The first is a very questionable procedure, except for infants, and to be used only in the funicular form. The second is sometimes satisfactory when combined with the truss, but there is very much objection to the injection of an irritant, because of the danger of sloughing, the entrance of some of the irritant into the abdominal cavity, or a disastrous effect on the cord. The third methods are the only logical ones in that they embrace removal of the cause. Removal of the sac is preferable to incision and drainage, which means an open wound and the possibility of infection.

New York Medical Journal.

June 18.

19 The Doctor's Duty to the State. J. B. Roberts.
20 The Treatment of Empyema of the Thorax. H. Schiller.
21 The Fever of the Puerperium (Puerperal Infection): a Chronological Review of the Doctrines of its Etiology and of the Methods of Treatment from Early Times to the Present. (Continued.) J. H. Burtenshaw.
22 *Report of a Case of Splenomyelogenous Leukemia. C. M. Ross.
23 *Labor Complicated by Fibroid and Ruptured Uterus. E. T. Hargrave.
24 *Appendicular Abscess with Fishbone in the Appendix. Operation; Recovery. W. P. McIntosh.

22. Splenomyelogenous Leukemia.—Ross gives a detailed report of one case in which the diagnosis was based on the following typical points: (1) the absence of any etiologic factor; (2) the absence of any constitutional symptom until the enormous spleen produced such pressure effects as edema of the feet, gastric disturbance and constipation and dyspnea; (3) the typical picture shown by the blood, the white blood cells, consisting largely of myelocytes numbering almost one-fourth the number of reds, with the comparatively small diminution in red blood cells and hemoglobin, and the absence of malarial organisms.

23. Fibroid Complicating Labor.—Hargrave reports a case of fibroid of the uterus complicating labor in a multipara. The tumor was not discovered until after the woman had been in labor for two days, when medical aid was called for. On examination a large tear was found in the right side of the fundus, but before operative procedures could be instituted, and in spite of hypodermic injections of ergot and strychnin and hot saline enemata, the patient died.

24. Fish Bone in Appendix.—McIntosh reports a case of appendicular abscess where, on operation, he found in the appendix a fish bone about one and a half inches in length and about the thickness of an ordinary silver probe.

Boston Medical and Surgical Journal.

June 9.

25 Carcinoma Basocellulare. A Group of Superficial Gland-like Tumors of the Skin, of Relatively Slight Malignancy, Including Rodent Ulcer. S. C. Emley.
26 The Relation of the Burn to the Bullet Hole as Evidence of Homicide vs. Suicide; Report of the Nagle Case. Jay Perkins.

June 16.

27 The Casper-Hirschmann Demonstration and Photographic Cystoscope. G. S. Whiteside.
28 *Human Slavery as a Prevention of Pulmonary Consumption. T. J. Mays.

28. Slavery as a Prevention of Pulmonary Consumption.—Mays calls attention to the fact that pulmonary consumption was comparatively unknown among the slaves in the South before the war. The death rate among the negroes from consumption in Charleston, S. C., in 1860 was the same as among the whites, 1.75 per thousand. In 1902 the death rate among the whites was 1.43, and among the negroes 5.74. The same condition obtained in other of the southern cities. Why, says Mays, should the death rate from consumption be from 200 to 400 per cent. larger among the negroes than among the whites of the South at the present time, and this in spite of the fact that they were on an even basis in this respect in 1860. The reason is that since they attained their freedom, their entire social, economic and industrial being has been revolutionized, they are thrown on their own resources and are forced into a struggle for existence for which they have neither the wisdom nor the organized constitutional or mental strength necessary for a successful issue. The author believes that the prevention of pulmonary consumption resolves itself into such efforts of education as will impress the masses with the importance of leading a life similar to that (excepting slavery) which made the slave population of the South practically immune from this disease before the Civil War. Such efforts of prevention mean the inculcation of sound principles of hygiene; the eating of wholesome and properly prepared food; the wearing of suitable and seasonable clothing; the avoidance of damp, insanitary and overcrowded dwellings; the abstinence from nerve strain and overwork; the shunning of strong drink and other vices; the teaching of the value of useful labor; training in physical development; encouragement of agricultural and mechanical pursuits; the supervision of proper convalescence from what seems the trivial cold or cough, or from acute illness or injury, etc. He suggests, as a means toward the end, the taking hold of this work among the masses by charitable organizations, as is being done in some of the larger cities at the present time.

Cincinnati Lancet-Clinic.

June 18.

29 Idiopathic Cardiac Dilatation. G. A. Fackler.
30 The Local Clinical Laboratory. Martin L. Stevens.

Bulletin of the Johns Hopkins Hospital, Baltimore.

April.

31 *Vaccine and Vaccination. George Dock.
32 The Sinus Frontales in Man with Observation on Them in Some Other Mammalian Skulls. Adelbert Watts Lee.
33 A Modified Nocht's Stain. T. W. Hastings.
34 Complications Arising from Freeing the Ureters in the More Radical Operations for Carcinoma Cervicis Uteri, with Special Reference to Post-operative Ureteral Necrosis. John A. Sampson.
35 The Silver Bolt as a Means of Fixing Ununited Fractures of Certain Long Bones. Stephen H. Watts.
36 Exhibition of Four Appendices Vermiformes Showing Unusual Pathologic Conditions. C. F. Burnam.

31. Vaccine and Vaccination.—Dock reviews the history of vaccination, describing the material used from the earliest time up to the present, the methods of preparation and preservation, pointing out the defects and objections to their use. Speaking of glycerinated vaccine, he quotes the following conclusions drawn by Copeman:

1. Great increase in the quantity can be obtained without any consequent deterioration in quality, the percentage of insertion success following on its use being equal to that obtained with perfectly active fresh lymph. 2. It does not dry up rapidly, thus simplifying the process of vaccination. 3. It does not coagulate, so that it never becomes necessary to discard a tube on this account. 4. It can be produced absolutely free from the various streptococci and staphylococci which are usually to be found in untreated calf lymph, and which are, under certain circumstances, liable to occasion suppuration. 5. The streptococcus of erysipelas is rapidly killed out by the germicidal action of the glycerin. The danger of "late" erysipelas is diminished by reason of there being no necessity to open the mature vesicles for the purpose of obtaining lymph. 6. The bacteriologic purity and clinical activity of large quantities of the lymph can be readily tested prior to distribution.

Rosenau has shown that practically all the vaccine virus sold in this country has an unnecessarily large bacterial contamination, a deplorable state of affairs. Although such contamination need not necessarily indicate dangerous infective possibility, yet this may be the cause of the frequent secondary infections that occur from such virus. In this connection he mentions tetanus. It is possible that sudden calls for large quantities of vaccine compel the makers to put on the market "unripe" vaccine. Systematic vaccination would do away with many of the imperfections now existing. Much of the vaccine manufactured is seriously lacking in specific power, thus nullifying the purpose for which vaccination is performed, and necessitating early and frequent revaccination. Many of these defects may be obviated either by public manufacture of vaccine or by public inspection, as carried out, to some extent, for the last two years by the Public Health and Marine-Hospital Service.

Ophthalmic Record, Chicago.

May.

37 Two Cases of Rare Nervous Lesions of the Eye. Oscar Wilkinson.
38 Subconjunctival Dermo-lipomata. Richard H. Johnston.

39 *Iridectomy for Glaucoma and Its Immediate After-treatment. Albert B. Hale.
40 *Papilloma of the Conjunctiva. Richard H. Johnston.
41 Case of Methyl-alcohol Amblyopia. William H. Wilder.
42 *Case of Tubercular Iritis Treated by the Injection of Air Into the Anterior Chamber. Clarence W. Heath.
43 Report of a Case of Congenital Exophthalmos Produced by Orbital Hemorrhage Followed by Metastatic Choroiditis. C. A. Veasey.
44 *Unilateral Exophthalmos in Exophthalmic Goiter, with Report of a Case. Wm. Campbell Posey and Walton C. Swindells.

39. **Glaucoma.**—Hale reviews opinions as to the after-treatment of glaucoma, and the question whether eserin or atropin should be used. He thinks the continuance of eserin after operation might induce an iritis that would be hard to overcome, as well as temporarily obscure symptoms which show whether the operation is a complete success. He thinks it best to use no eserin until the wound has healed. Considering the operation apart from glaucoma, we might be tempted to use atropin at once, as some authorities have advised, but there is a danger. Iridectomy may not be successful in restoring filtration and reducing tension, and the drug might precipitate a fresh attack that would otherwise be escaped. Under the circumstances he does not consider it safe. His conclusion is that no drug should be used until the corneal wound has healed, and the eye is no longer to be considered as a purely surgical matter, when such drugs may be employed as indicated.

40. **Papilloma of the Conjunctiva.**—Johnston calls attention to the fact that in a former paper (*Ann. Ophth.*, July, 1903), after a careful search of the literature for recorded cases of this condition he only had found 30 well-authenticated and 5 doubtful cases. Since then other cases have been reported. He reports a second case that occurred within two years at the Presbyterian Hospital, Baltimore, of typical benign papilloma involving the conjunctiva and a small portion of the cornea.

42. **Iritis.**—The injection of air into the anterior chamber was performed as follows: A hypodermic syringe was used, the piston of which was first pressed home to exclude the air from the barrel and then withdrawn half way, while cotton was held over the needle point to filter the air as it entered. The needle was then introduced into the anterior chamber, through the external limb of the cornea, in a slanting position, so as to go through a considerable thickness of the same, thereby making a more secure closure after the needle was removed. The handle of the hypodermic was lowered and about three-quarters of the aqueous withdrawn. The liquid going to the lower end of the barrel, left the filtered air above, next to the needle. The piston was gently pressed and the air filled the space in the anterior chamber, restoring the normal tension. It was then withdrawn. The next day there was very little reaction and the air introduced was two-thirds absorbed, and on the following day only a small bubble remained. The operation was repeated at weekly intervals until four injections had been made with negative results. The growths continued to increase interruptedly. Heath's conclusion is that in cases of tubercular iritis, where the lesion is well established, air injections will not effect a cure.

44. **Unilateral Exophthalmos.**—Posey and Swindells report a case which improved under treatment and discuss the literature.

Chicago Medical Recorder.

May 15.

45 *Spurious Dysmenorrhea. A Plea for a More Rational Treatment. Henry T. Byford.
46 *Parasyphilitic Disorders. Archibald Church.
47 *Syphilis as a Cause of the Neuroses. L. Harrison Mettler.
48 Syphilis as a Cause of Psychoses. Richard Dewey.
49 *Some of the Difficulties to Be Overcome in the Radical Mastoid Operation for the Cure of Chronic Purulent Otorrhea. Frank Allport.
50 *More Local and Less General Anesthesia in Gynecologic Operations. J. Clarence Webster.
51 Tubercular Spondylitis: Diagnosis and Prognosis. John L. Porter.
52 Goiter, with Report of a Case Complicated by Pregnancy, Late Tracheotomy and Death. Frank H. Edwards.

45.—See abstract in THE JOURNAL of January 9, p. 118.

46. **Parasyphilitic Disorders.**—Church reviews the various conditions which may arise at a late period after syphilis, and thinks that from a practical standpoint every paretic or tabetic should be looked on as a syphilitic. Nine out of ten of these cases may be attributed to parasyphilitic infection.

47. **Syphilis as a Cause of Neuroses.**—After reviewing the functional troubles which may be due to specific disease, Mettler offers the following conclusions:

1. Syphilitic infection can produce a pure neurosis. Most of the neuroses so produced, however, are but the preliminary indications of gross organic syphilitic disease of the nervous system. 2. Syphilitic neuroses are as much syphilis of the central nervous system as are the organic syphilitic diseases. They call for the same anti-syphilitic treatment as the latter do.

49. **Mastoid Operations.**—Allport considers that the dangers of the radical operation for mastoiditis are such that it should not be attempted except by a competent man, and when its urgency is thoroughly manifest. He reviews the various objections and the ways in which dangers such as facial paralysis, opening of the lateral sinus, etc., may be avoided, and concludes that there has been a great and favorable evolution of improved operative technic in the last few years, and that the operation is gradually losing its terrors and disadvantages, and will soon be set up in a position of safety and assurance that its performance can not be avoided by those pretending to do the best and most advanced aural surgery.

50.—See THE JOURNAL, April 23, p. 1061.

Journal of Nervous and Mental Diseases, New York.

June.

53 Neurology in Philadelphia from 1874 to 1904. Charles K. Mills.
54 *Evolution of the Rest Treatment. S. Weir Mitchell.
55 *The Metaphysical Conception of Insanity. James H. Lloyd.
56 *The Surgery of Idiocy and Insanity. J. Chalmers Da Costa.
57 Mystic Medicine. F. X. Dercum.

54. **Evolution of the Rest Treatment.**—Mitchell, the well-known originator of this method, gives the steps which led him to its development, reporting a case where rest in bed seemed at first to do some good, but later brought about the still more unpleasant symptoms of nausea, constipation, etc. That the patient needed rest he saw, and that she required some form of exercise was also clear. He asked himself why rubbing might not do for the muscles and circulation what voluntary exercise would have done, and brought an attendant whom he instructed as to the manipulations, with remarkable results. This case taught him the means of using rest in bed without causing the bad effects of unassisted rest; that it was a tonic, and that with the influence of massage and the combination of seclusion, massage and electricity he could overfeed the patient until he had brought her into a state of perfect health. Shortly after he began to employ a similar method in other cases, being careful in his selection as to their suitability. He first mentioned his treatment in print in 1875, again in 1877, and the same year published his book on the rest treatment. He thinks he made this "rest" too prominent in the title of his book and the method was received with considerable incredulity, but he claims that the later results have shown that it is one of the most scientific remedial methods.

55. **The Metaphysical Conception of Insanity.**—Lloyd combats the idea of the independence of the mind and brain as indicating a spiritual disease in insanity. It is a disease, he says, not of abstract mental qualities, but of the organic brain cells, and a disease process in a nerve cell is not likely to respect scholastic distinctions, for a microbe may be more potent than a philosopher in analyzing a mental state. One should not study insanity as a philosopher, but as a physician.

56. **Surgery of Idiocy and Insanity.**—Da Costa reviews the methods that have been suggested and tried for insanity and the effects of surgical operations. He thinks that shock may sometimes cause insanity and sometimes arrest it, just as an explosion which may stop a clock or sometimes start one which is wound but not running. The cure may be due to fear, to a strong arousing of the will, to an awakening of hope, or to an alteration in the intracerebral pressure. All the influences except the last would be more noticeable when anesthesia is not used than when it is

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given. Such sudden cures are not likely to be permanent, and one should not lose sight of the fact that though surgical operation may be followed by an apparent cure, it is a great responsibility to recommend operation with the object of inducing the rare occurrence of cure. There is always considerable doubt as to what part of the operation is brought into play in producing the arrest, and whether the patient might not eventually have become cured if let alone. Insanity may be associated with physical conditions, which, while not actually the cause of the insanity, may predispose to it, and that cure of such a condition by surgery may be followed by improvement by removing certain constantly acting irritants. An examination of the recorded cases of surgical cures of insanity show many defects in observations and deductions. Some of the operators have been extremely optimistic. In discussing the special conditions he notices operations that have been suggested for microcephalic idiocy, but only to condemn them in general. Microcephaly is not the result of premature sutural modification. It is not merely the brain, but the entire organism that is undeveloped. The proper treatment for hydrocephalus is educational, hygienic and disciplinary. In uncomplicated cases operation is never justifiable. The mortality is too high, and while certain complications may arise to make trephining justifiable, they can not be expected to affect the general condition. In traumatic idiocy, or where pressure symptoms arise, operation may be justifiable. As regards the hydrocephalic idiocy and imbecility, he speaks with some commendation of the operation of McArthur of Chicago, who introduces a metal tube into the lateral ventricle and carries it to the margin of the drill opening, suturing the scalp over it. In this way the danger of infection from ventricular drainage is avoided, as the surplus fluid reaches an absorbent region. Operations for epileptic insanity are indicated where they would be indicated in ordinary epilepsy without the insanity, but are less promising in these cases than in the non-insane ones. The advantages of operations for paresis have been overestimated, but he thinks there is a possible value in the operation in retarding the progress of the case, though its value is questionable. He does not speak favorably of operations for ordinary non-traumatic insanity, paresis nor for hypochondriacal delusions. There is no use in operating for obsessions, in his opinion, and he reviews a number of cases. Operations for hallucinations are also considered of little value. For traumatic insanity there may be some possible utility, but as for the accidents where insanity soon follows head injuries, with a scar or bone depression and local symptoms, operation positively should be undertaken. Where insanity is developed later, still with the same evidence, it should also be performed. In any case where there are positive signs of increased pressure, trephining may be considered as a palliative. The value of abdominal and gynecologic operations is recognized for certain cases, but healthy organs should not be disturbed for unaccountable visceral delusions. He thinks Hobbs' statistics are extraordinarily favorable, and he evidently takes them *cum grano*. In spite of the commendatory opinions of authorities, he thinks it should not be the rule to perform operations on the abdomen, genito-urinary organs or nasopharynx, with the hope of curing the insanity, but they should be done when the disease is of sufficient severity to call for interference, and in some cases may be followed by an improvement in the mental condition.

Medicine, Detroit.

June.

58 *Rupture of the Uterus, with a Critical Review of 50 Cases from the Standpoint of Treatment. W. A. Newman Dorland.
59 *Some Factors in the Etiology of Pneumonia. J. M. French.
60 *Visceral Syphilis. John M. Swan.
61 Syphilis of the Nervous System. Charles W. Burr.
62 *The Dose as a Variable Therapeutic Factor. A. M. Fernandes De Ybarra.

58. **Rupture of the Uterus.**—Dorland concludes that incomplete lacerations of the uterine wall, if the hemorrhage be moderate and the diagnosis accurate, may be well treated by careful vaginal and intrauterine tamponade and expectant treatment. Complete lacerations, the peritoneal cavity being opened, should, under favorable circumstances, such as uncleanliness of locality and lack of surgical appliances, be treated temporarily by intrauterine tamponade and the administration of astringents and stimulants. The patient should then, if possible, be conveyed to some hospital and an abdominal operation performed. Under favorable circumstances the cavity should be opened as speedily as possible and the rupture in the uterine wall sutured in suitable cases, or a Porro operation or a total extirpation be performed, according to the nature of the case. He gives a classification of cases reported by various authorities in the conclusion of his paper.

59. **Pneumonia.**—French reviews the etiologic factors in pneumonia, noting that it is most fatal in the extremes of life and its largest mortality between the ages of 3 and 20. That while there are fewer cases in women than in men, accounted for by their generally lessened exposure, their mortality is greater. Race seems also to have an influence, as shown by the statistics in the Johns Hopkins Hospital and in Budapest. Jews show a greater vitality than others. Residents of cities seem to be more liable, and occupation naturally has something to do with the cause. The season of the year exerts a very great influence, and atmospheric vicissitudes, likewise alcoholism, disease or disability and trauma, as Osler believes, especially injuries to the chest. While we may safely accept it as an infectious disease, it does not follow that exposure to infection will be followed by the disease. In most instances a weakened or debilitated condition of the system pre-exists, but a direct or exciting cause, such as exposure and temperature change, must be added to the action of the germ itself. The increased mortality of late years has been variously accounted for, but he does not venture to lay down any positive opinion on the subject.

60.—This article has appeared elsewhere. See THE JOURNAL of May 14, ¶138, p. 1321.

62. **The Dose as a Therapeutic Factor.**—The varying effects of medicine, according to the dose, are reviewed by De Ybarra, who gives the various conditions which may modify the action of the medicine. He thinks that the common teachings of materia medica and therapeutics are not sufficiently full on this point, and notes the differences that are made by the process of manufacture, etc.

Albany Medical Annals.

May.

63 *Experimental Pancreatitis Considered in Its Relation to the Acute Forms of Pancreatitis in Man. Richard M. Pearce.

63. **Pancreatitis.**—As compared with experimental pancreatitis, and in relation to the question whether the methods thus employed may operate in man, there are four possibilities, as Pearce remarks: 1, ferments originating in the pancreas; 2, bacteria; 3, gastric juice, and, lastly, bile. There is some evidence that fat necrosis may be caused by ferments produced in the destruction of pancreatic parenchyma. As regards the second point, there has been an increased absorption of tissue or bacteria with hemorrhagic pancreatitis, but there is a lack of uniformity in the findings. Most authorities agree that they represent a secondary infection and are not concerned in the etiology of the lesion. That the gastric juice may enter the pancreatic duct and produce an inflammation of the pancreas, presupposes a powerful anti-peristaltic or other action, forcing the secretion into the duct; of this we have no definite evidence. Experiments on dogs made by the author have given none but negative results. Still he thinks it possible that under certain pathologic conditions intestinal fluids may be forced into the duct, but reports a case which seems conclusive as to the negative action of the natural gastric juice on the pancreas parenchyma. The relation of the bile to acute pancreatitis has been substantially supported by experimental observation, and the not infrequent occurrence of the lesion with cholelithiasis. The reported cases show that cholelithiasis is associated very constantly with hemorrhage and the gangrenous form of the disease, but it does not explain all the cases. A case is reported which would seem to indicate that stone, after obstructing the papilla of the orifice and causing pancreatitis, may escape into the intestine and perhaps be overlooked entirely. The sequence of

histologic changes in hemorrhagic pancreatitis, the addition of gangrenous pancreatitis as secondary to hemorrhage, in the majority of cases, and suppurative pancreatitis, are also noted. Fat necrosis, which is generally an accompaniment of the hemorrhagic and gangrenous forms, has been shown, experimentally, by Langerhans and others, to be due to pancreatic ferments. It bears the same relation to obstruction of the pancreatic ducts as jaundice does to hepatic obstruction. The theory that postmortem digestion of the pancreas may set free the pancreatic secretion and allow the development of fat necrosis has little evidence to support it.

Proceedings of the Philadelphia County Medical Society.

April 30.

64 Infection in the Upper Abdomen: Probably an Abscess of the Liver of Amebic Origin. John H. Musser and De Forest Willard.
65 *The Surgical Relation of the Vermiform Appendix to Perforation in Typhoid Fever. Levi Jay Hammond.
66 *The Antiseptic Treatment of Smallpox. Samuel M. Wilson.
67 Recent Advances in Our Knowledge of Immunity. Joseph McFarland.
68 Consideration of Some of the Methods to Be Pursued in the Diagnosis of the Diseases of the Rectum and Anus. Lewis H. Adler, Jr.
69 Lilliputian Delivered of a Living Child by Cesarean Section. L. H. Bernd.

65.—See THE JOURNAL, April 16, page 998.

66. The Antiseptic Treatment of Smallpox.—The antiseptic method of smallpox treatment consists in the daily use of the scrub bath. It is referred to in some recent text-books, but is not advocated generally because of its painful nature after vesiculation has occurred. Thoroughly used before the primary papules develop, it appears to prevent vesiculation. If instituted late, it does away, to a great extent, with the repulsive appearance and foul odor characteristic of cases treated without this means. If the patient is not seen until vesiculation has commenced, the summits of the vesicles must be punctured, compresses of full strength hydrogen peroxid solution applied, and these followed by a mask wet with some antiseptic. A solution of mercury bichlorid—1 part in 1,500 parts of water—gives good results. This need remain in place for a few minutes only. The peroxid, followed by the mask, may be used several times daily, if desired, and seems to comfort the patient as well as promote desquamation. In two unvaccinated young girls, where vesiculation was commenced when the patients were first seen, the scrubbing, combined with puncture of the vesicles, was very successful. Where it was applied thoroughly the vesicles, though large and numerous, left only faint traces, almost imperceptible on close examination. In other parts, not so thoroughly treated, well-marked pitting occurred. Neither child was seriously sick after the seventh day.

Physician and Surgeon, Detroit and Ann Arbor.

April.

70 Cystitis. Frank B. Walker.
71 Refraction and the Use of Mydriatics. Louis J. Goux.
72 *A New Treatment of Tuberculosis. Heneage Gibbes.
73 *Headache and Gynecology. J. H. Carstens.

72. Tuberculosis.—Gibbes describes tuberculosis and syphilis in their pathologic action, and refers to his conception of obtaining the action of metallic salts on the different tissues. By experimenting on animals, he obtained some interesting results, and is now working on cancer with the method. After years of work he conceived the idea of introducing something into the circulation that would combine with the toxin causing the disease, forming a combination in itself inert. With this view, Dr. E. L. Shurly and himself originated their method of treating tuberculosis with chlorid of gold and iodin. This was abandoned, however, on account of the inconvenience to the patient, but the results obtained showed that there was some virtue in the treatment. After many experiments he obtained an iodid of calcium with which he found he could introduce the iodin into the system in a painless manner, and he also found that in the double salt of palladium chlorid and sodium he had a substance of much higher oxidizing power. With this solution 10 minims represent 1/15 of a grain of salt; he uses this with an initial dose of 3 minims once a day, gradually increasing it to 25, or even more in some cases, treating each case according to the individual indications. The iodin he gives in doses of 1/3 of a grain three times a day, gradually increasing the dose to 1 grain, according to the patient's condition. The possible complication of a mixed infection, he thinks, is somewhat exaggerated, but he finds that three or four injections of 10 c.c. of streptolytic serum meet the conditions. The cases that are suitable for this treatment are those in which the disease has not progressed too far, and the vitality of the patient not too much reduced. Such a case with a moderate-sized cavity soon shows benefit in the reduction of the fever, cessation of night sweats, reduction in the cough, increased appetite and gain in weight. He has been able to check the disease in a number of cases, and in some cases of tubercular laryngitis to completely free the throat from the lesion. He thinks the cures may be permanent.

73. Headache.—Carstens thinks the idea of reflex disturbance has been made too much of by the profession. There are less of them than supposed, and he reports cases of gynecologic postoperative headache in which he found other conditions really responsible. The point he specially wishes to make is the influence of syphilis in these cases. He summarizes as follows:

1. Headaches are often not due to diseases of the pelvic organs.
2. Headaches are often caused by obscure tertiary syphilis.
3. When patients are suffering from more or less headache, especially accompanied by sleeplessness, make careful examination for characteristic syphilitic lesions. If you fail to get a history of marked symptoms, try a little mercury and potassium iodid anyway.

Medical Age, Detroit.

June 10.

74 Asthma and Hay Fever the Hypothesis of Identity. Henry B. Hollen.
75 Chronic Dysentery—A Protest. A. B. Cooke.
76 How We Should Treat Rheumatism. J. W. Palmer.

Northwestern Lancet, Minneapolis.

June 1.

77 Medical Graft. J. H. James.
78 Non-valvular Heart Sounds. J. G. Cross.

American Practitioner and News, Louisville.

May 15.

79 Gallstones. J. Garland Sherrill.
80 Hernia—Report of Cases. Irvin Abell.

June 1.

81 Can Bovine Tuberculosis Be Transmitted to Man? M. K. Allen.

Virginia Medical Semi-Monthly, Richmond.

June 10.

82 A Plea for Exploratory Incision for Diagnostic and Curative Ends in Masked Conditions of the Upper Portions of the Abdomen. Huzh M. Taylor.
83 The Modern Treatment of the Morphin, Whisky and Other Drug Addictions. S. M. Crowell.
84 A Historical Note on the Hypodermic Syringe. George Barksdale.
85 Prevalence and Mortality of Epidemic Pneumonia. Louise Southgate.
86 The Etiology and Sequelæ of Piles. W. L. Pepe.
87 The Treatment of Hemorrhoids. Geo. K. Sims.
88 The Cold-Wire Snare as an Aid in the Office Treatment of Hemorrhoids. Charles C. Miller.
89 Report of a Case—Spontaneous Fracture of the Clavicle. Jno. E. Canaday.
90 Need of Medical Legislation for the Benefit of the Medical Profession and for the Public. G. D. Lind.

Western Medical Review, Lincoln, Neb.

May.

91 Surgical Complications of Pneumonia. Van Buren Knott.
92 Emergency Element in Abdominal Surgery. Byron B. Davis.
93 Obstetrics. A. B. Somers.
94 The Duty of the Patient to the Physician. J. M. Mayhew.
95 Rhinoplasty by the Indian Method—Report of a Case. L. B. Pilsbury.

Journal of the Kansas Medical Society, Topeka.

June.

96 Medical Legislation. George A. Boyd.
97 Acute Otitis Media. J. P. Blunk.
98 Climatic Treatment of Pulmonary Diseases. J. N. Hall.
99 Chemical Examination of the Urine. (Continued.) J. F. Preston.
100 Chronic Nasal Catarrh. A Simple and Effective Treatment. G. A. Gilbert.

Journal of the Association of Military Surgeons, Carlisle, Pa.

June.

101 Army and Navy General Hospital at Hot Springs, Ark. George H. Torney.
102 Pathology of Chronic Specific Dysentery of Tropical Origin. Charles F. Craig.
103 The Japanese as Military Sanitarians. John Van Rensselaer Hoff.

104 *The Medical Profession in the Public and Private Life of America. Charles A. L. Reed.
105 The Prospects of the Young Military Surgeon. William H. Taft.

104.—See THE JOURNAL of May 14, p. 1283.

Vermont Medical Monthly, Burlington.

April 25.

106 Suprapubic Cystopexy. A. Lapthorn Smith.
107 Tetanus. H. S. Carver.
108 Neurasthenia in the Male. H. Edwin Lewis.

Maryland Medical Journal, Baltimore.

June.

109 Prophylaxis of Summer Diarrhea. J. H. Mason Knox, Jr.
110 Sporadic Case of Cerebrospinal Meningitis, with a Description of the Pathologic and Bacteriologic Findings. Robert Reuling.

Washington Medical Annals, Washington, D. C.

May.

111 Headache in Relation to Diseases of the Nose and Nasopharynx. Oscar Wilkinson.
112 Case of Retroperitoneal Sarcoma. Edward A. Balloch.
113 Case of Laminectomy. Edward A. Balloch.
114 Notes on a Case of Abscess of the Lung Due to the Presence of a Rivet One Inch or More in Length. J. W. Chappell.
115 Case of Abscess of Liver. G. W. Cook.
116 The Instructive Visiting Nurses' Society of Washington. Anne A. Wilson.
117 Case of Gastroenterostomy with the Murphy Button. G. Tully Vaughan.
118 Case of Foreign Body in the Lungs. A. R. Shands.
119 Prognosis and Treatment of Urethral Strictures. E. L. Keyes, Jr.

Albany Medical Annals.

June.

120 A Report of the Work of the Special Obstetrical Department of the Albany Guild for the Care of the Sick Poor. H. Judson Lipes.

Denver Medical Times.

June.

121 Some Observations on Chronic Seminal Vesiculitis. Leonard Freeman.
122 Croupous (Lobar) Pneumonia of the Abortive Type. James Rae Arneill.

Los Angeles Medical Journal.

June.

123 Colles' Fracture. Fred C. Shurtleff.
124 Puerperal Infection. J. H. Seymour.
125 Indications for Treatment in Desperate Cases of Lobar Pneumonia. Robert H. Burton.

Colorado Medicine, Denver.

June.

126 The Buelow Method of Drainage in Pyopneumothorax. H. B. Whitney.
127 The First Appendectomy. W. W. Grant.
128 Perforating Ulcer of Stomach; Operation; Recovery. Charles A. Powers.
129 Abortions in General Practice. A. N. Moody.
130 Consumptives in Colorado. W. T. Little.

The Alienist and Neurologist, St. Louis.

May.

131 Multiple Neuritis: A Clinical Lecture. F. W. Langdon.
132 Limiting the Term "Insanity." J. W. Wherry.
133 Outlines of Psychiatry in Clinical Lectures. C. Wernicke.
134 Mixoscopic Adolescent Survivals in Art, Literature and Pseudo-ethics. (To be continued.) James G. Kiernan.

Iowa Medical Journal, Des Moines.

June 15.

135 Present-day Treatment of Tuberculosis. J. W. Kime.
136 Abdominal Wound Closure. J. Lynn Crawford.
137 A Country Doctor's Medicine Case. H. C. Eschbach.
138 Report of a Case of Typhoid Fever Complicated by Tetany. E. H. Dwelle.
139 "Tics." L. W. Littig.

Medical and Surgical Monitor, Indianapolis, Ind.

June 15.

140 Address. Central College of Physicians and Surgeons and Medical Education in Indiana. C. B. Sowder.
141 Strangulated Hernia in the Very Old. D. C. Peyton.
142 Appendicitis. Charles C. Miller.
143 Infant Feeding. C. B. Sowder.
144 Apomorphin Hydrochlorid. J. W. Walnwright.
145 Chronic Hematuria. A. T. Stewart.
146 Intra-abdominal Torsion of the Omentum. Thomas B. Noble.

California State Journal of Medicine, San Francisco.

June.

147 The Active Principle of the Adrenal Gland. What Name Shall Be Given to It? Philip Mills Jones.
148 Scurvy in Infants. William Fitch Cheney.
149 Pure Food Law. M. E. Jaffa.
150 The Rat and His Parasites; His Rôle in the Spread of Disease, with Special Reference to Bubonic Plague. (Continued.) R. J. Lloyd.
151 A Case of Gallstones. E. Harbert.

Journal of Cutaneous Diseases, New York.

June.

152 Acute Infectious Pemphigus in a Butcher During an Epizootic of Foot and Mouth Disease, with a Consideration of the Possible Relationship of the Two Affections. John T. Bowen.
153 Preliminary Note Relative to the More Efficient Utilization of the Spark-gap Radiations. Henry G. Piffard.
154 Dermatitis Exfoliativa Neonatorum or Ritter's Disease. Arthur J. Patek.
155 Warfare Against Venereal Diseases in Germany. E. Lesser.

Medical Herald, St. Joseph, Mo.

June.

156 Treatment of Some Forms of Intestinal Obstruction by the Aid of an Artificial Valvular Fistula and Intestinal Exclusion. J. E. Summers, Jr.
157 The Question of the Division of Fees. O. B. Campbell.
158 The Doctor. John D. Reba.
159 Sarcoma of the Brain. F. E. Walker.
160 The "Action" of Drugs. Joseph Clements.
161 The Dynamics of Defervescent Compound and Dosimetric Trinity. P. J. Smith.
162 Pernicious Vomiting of Pregnancy. J. H. Talboy.
163 Gastric Ulcer. J. C. Waterman.

Brooklyn Medical Journal.

June.

164 Care and Treatment of the Alleged Insane at the Kings County Hospital. Sidney D. Wiligus.
165 The Coming Method of Treatment of Salpingitis. S. J. McNamara.
166 Some Clinical Variations of Sarcoma. With Report of a Rapidly Fatal Case. B. B. Mosher.
167 Some Considerations in Relation to Surgical Practice Among Children. C. LeGrand Kerr.

Kansas City Medical Index-Lancet.

June.

168 Pelvic Exudate; with Report of Cases. C. Lester Hall.
169 Modern Views of Locomotor Ataxia. John Punton.
170 The Blood. (Continued.) M. P. Overholser.
171 A Visit to the Texas State Medical Association. John Punton.
172 Case of Amaurotic Family Idiocy. Ernest Sachs.

Medical Examiner and Practitioner, New York.

June.

173 Arteriosclerosis in Its Relation to Life Insurance. Wm. Cuthbertson.
174 Functional Changes in Relation to Hypertrophy and Dilatation of the Heart. S. Eisenstaedt.
175 The Medical Examination. Frank S. Grant.
176 Microscopic Examinations in Doubtful Cases. H. Taylor Cronk.
177 The Blood as a Detail in Life Insurance Examinations—a Study in Technic and Interpretation. Woodbridge H. Birchmore.
178 Life Insurance Examination as a Business. J. A. De Armand.

International Journal of Surgery, New York.

June.

179 Notes on Gastro-enterostomy and Report of a Mikulicz-McGraw Operation with Unusual Complications. P. D. Gray.
180 Edematous Encephalitis: a Study of Some Conditions Found in Operating for Cerebral Epilepsy and Allied Affections. W. P. Carr.
181 Plea for Conservative Surgery of the Hand. Paul F. Eve.
182 The Surgical Assistant. (Continued.) Walter M. Brickner.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London.

June 4.

1 Arterial Sclerosis and Hypertonus in Their Relations to Diet and to the Digestive System. W. Russell.
2 Essential Similarity of Innocent and Malignant Tumors. C. W. Cathcart.
3 The Obstetric Satchel; the Problem in Asepsis. J. W. Valentine.
4 *The Value of the Imperfectly Descended Testis, the Advisability of Operation, and the Value of the Operations Performed for Its Relief. E. M. Corner.
5 Four Abdominal Cases. D. MacIlwan.

June 11.

6 Cancer of the Pancreas. L. Brunton.
7 The Modern Pursuit of Novelties in Medicine. D. Duckworth.
8 Organization of the Home Treatment of Pulmonary Tuberculosis. R. W. Philip.
9 Pregnancy After Removal of Both Ovaries for Dermoid Tumor. W. A. Meredith.
10 *The Relative Efficiency of Some Surgical Dressing Materials. A. N. McGregor and R. Ramsey.
11 *A Bacteriologic Inquiry Into the Sterilization of Hands. J. R. Collins.
12 Therapeutic Value of Radium and Thorium. J. M. H. MacLeod.

4. **Imperfectly Descended Testes.**—Corner discusses the physiologic value of the imperfectly descended testes both before and

after operation. The imperfect descent is only the outward, anatomic and visible sign of an inward and much more extensive physiologic defect. In order to estimate the value of the gland it is necessary to make inquiries along two lines: 1, its functional capacity; 2, its effect on the perfection of the so-called secondary sexual characters of the organism, the more important factor of the two. He believes that the embryologic development of the gland indicates clearly that the cause of the primary sexual characters of the organism are the results of inherent tendencies of the ovum, and are not due to any action of the ovaries or testes. Some of the secondary sexual characters are developed as the result of an internal secretion, while others exist at birth. So that it may be accepted, that these secondary sexual distinctions are independent of the testes and ovaries for their origin. At puberty all sexual differences are exaggerated and some new ones are initiated. All these points must be considered in the treatment of imperfectly descended testes, how to make the best of this factor for the development of manly characters, or how to estimate the value of the internal secretion of the gland. It must be our foremost duty to do all we can to foster this internal secretion. So far as the procreative function of the imperfectly descended gland is concerned, it is *nil*. In view of this fact it is permissible to remove the organ, but because of its internal secretion, and the effect that this secretion has on the developing organism, it is advisable to consider the testes for a year or two, at least. The author considers the various operative procedures practiced for the relief of this condition and sums them up as follows:

1. Orchidopexy is only applicable in mild cases of imperfectly-descended testis, and perhaps even then it may not often be called for.

2. Orchidectomy is only justifiable under special pathologic conditions, for example, torsion, severe neuralgia, extreme atrophy and so forth, and in older cases, that is, after the occurrence of puberty and a possible and problematic period of testicular activity and spermatogenesis has passed, say from 22 upwards.

3. Replacement in the abdomen is indicated in far the majority of cases, and should be always done before puberty and, perhaps, up to the age of 20 or thereabouts. It would appear that the earlier the operation is performed the better should be the result.

4. No operation may be called for in mild cases when the testis is close to the bottom of the scrotum, or when the testes are abdominally retained.

5. Operative interference is demanded in most cases on account of the secondary changes of an inflammatory and sclerotic nature in the testis, which the position of imperfect descent leads to. Again, there is the frequent coexistence of a hernia with this condition. And in cases where it does not often or has never previously come down, the narrow opening or neck of the sac may cause one of the most dangerous varieties of strangulation.

10. Relative Efficiency of Surgical Dressing Materials.—McGregor and Ramsey have conducted a series of experiments with the view to determining the efficiency of some dressing materials. They used absorbent wool, plain gauze, Crimean cloth, wood-wool wadding, lint, and gauze impregnated with various medicinal substances. They believe that the variations in the efficiency of the medicated gauzes are due probably to the preparation of the material and not to the medicament used. The influences of temperature, surface evaporation, coagulation of fibrin and drugs will modify the results. They summarize their findings as follows:

1. The most suitable drainage material for the conveyance of fluids with solids in suspension is dry boracic lint; cellulose wadding is almost as efficient, but its friability renders it unsuitable for drainage purposes, unless enclosed in a gauze envelope.

2. The best covering materials for the speedy removal of the discharge from the distal end of the drain are cellulose wadding and gauze.

3. The covering material should be sufficient in amount to continue in action as long as the drain, and prevent saturation of the latter.

4. As the blocking of the drain takes place in four to eight hours, a more frequent dressing than usual is indicated.

11. Sterilisation of Hands.—Collins has carried out experiments to prove the possibility of sterilizing the hands thoroughly. Cultures were made of hands unwashed and also of hands washed for from one to five minutes in solutions of carbolic acid and bichlorid of mercury, the strength of the former being one in forty, and of the latter one in one thousand to one in five hundred. He summarises his results as follows:

1. The nail brush used should be either boiled before use, or, better still, kept always in an antiseptic solution.
2. Vigorous scrubbing is required for at least five minutes.
3. The water should be as hot as can be comfortably borne.
4. Chemical antiseptics of efficient strength should be used for cleansing the skin, and it is preferable that they should be used in the primary washing as well as in the final soaking.
5. With sufficient time and care sterilisation of the skin is not impossible.

The Lancet, London.

June 4.

13 Intermittent Hydrops of the Joints, and the Influence of Growth on Deformities. H. Marsh.
14 Some Disorders of the Spleen. (To be continued.) F. Taylor.
15 A Case of Acute Hemorrhagic Pancreatitis. E. T. Pixon.
16 *Pneumococcus Ulcerative Endocarditis Treated by Antipneumococcus Serum, the Pneumococcus Having Been Cultivated from the Blood. T. J. Horder.
17 Appendicitis. R. Coombe.
18 Some Points in the Diagnosis of Appendicitis. W. B. Bell.
19 Removal of the Semi-circular Canals in a Case of Unilateral Aural Vertigo. R. Lake.
20 *A Case Exhibiting the Adams-Stokes Syndrome. H. H. Laslett.

June 11.

21 Early Diagnosis of Tumors of the Bladder. C. B. Lockwood.
22 *Some Disorders of the Spleen. F. Taylor.
23 A Case of Perforated Gastric Ulcer; Diseased Appendix; Operation; Recovery. W. W. Cheyne.
24 Acute Lobar Pneumonia; Two Hundred Cases. J. Hay.
25 Acute Intestinal Intussusception; Four Cases; Operation; Recovery. F. C. Wallis.
26 Case of Acute Inversion of the Puerperal Uterus; Reduction by Taxis; Recovery. E. E. Croft.
27 Keplik's Spots in the Diagnosis of Measles. J. C. Muir.
28 Case of Renal Abnormality. R. Butterworth.
29 Unusual Case of Muscular Atrophy. W. L. Brown.

16. Antipneumococcus Serum in Ulcerative Endocarditis.—Horder reports a case in which the diagnosis was based on the physical findings and the cultivation of the pneumococcus from the blood of the patient. Although during the use of the serum the temperature was lowered considerably, there is no good reason, says Horder, for thinking that its use was attended with any benefit.

20. Adams-Stokes Syndrome.—Laslett reports a case occurring in a woman aged 69. During her youth she had several attacks of hematemesis. She always has been more or less bilious. Otherwise she enjoyed fair health; there was no history of rheumatism. The urinary findings were negative. Her last attack was accompanied by considerable retching and vomiting of small quantities of a clear watery fluid. The pulse was fairly full and slow. She soon recovered, but the following night had three fainting fits and quite a number of attacks in rapid succession early in the morning, lasting about a minute, associated with dilated pupils, gray cyanosis, stertorous breathing, rigidity of the body, and clonic, irregular movements of the arms. The pulse at both wrists was absent. Sneezing heralded the return to consciousness. After the attack the pulse was 60. The attacks increased in frequency, each accompanied by much the same symptoms. The lowest pulse rate was 36; generally it was 40. Examination of the heart showed that its contractions corresponded exactly with the pulse. The sounds were of moderate intensity, and there was a slight systolic murmur, heard best toward the aortic area. The right side was dilated with a distinct impulse over the lower end of the sternum. The radial artery was thickened and somewhat tortuous. The patient had about thirty seizures in all. Usually they occurred without warning, but sometimes were preceded by faintness or by a feeling as if some one were pressing on her chest and forcing her down. The treatment consisted of rest, quiet and, medicinally, 3 minims of liquor strychnia and 10 grains of potassium bromid three times daily, which the patient still is taking with, apparently, considerable benefit.

22. Disorders of the Spleen.—Taylor concludes his lectures on the disorders of the spleen. He considered all of the diseases of this organ etiologically, pathologically and symptomatically, especially with reference to their clinical importance. He believes that the spleen is more sinned against than sinning; that it is rarely responsible for the lesions which it suffers or from the complaints with which it is associated; that in the various infective processes, in splenic anemia and in infantile anemia it probably is poisoned from without; that in the different forms of leukemia it is overcharged with the excess of leucocytes; and that only in splenic anemia is the charge made against it that itself, having been poisoned from the bowel, it subsequently inhibits, by fresh production of poisons, the formation of the blood. It is in these diseases

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that good results have sometimes been obtained by splenectomy, though it must be admitted that death has sometimes taken place shortly after operation. In the other cases the primary condition must be treated, and in so far as that can be controlled or will spontaneously recover the enlargement of the spleen may be expected to subside. In splenomedullary leukemia considerable reductions in the size of the spleen have occurred under arsenic, and sometimes under oxygen inhalations, but relapse in this disease appears to be inevitable.

Bulletin de l'Académie de Médecine, Paris.

30 (LXVIII, No. 19.) *Influence of Nascent State on the Properties of Drugs and Its Therapeutic Application. A. Robin.—De l'influence de "l'état naissant" sur les propriétés des médicaments et de ses applications thérapeutiques.

31 (No. 21.) G. Contremoulins' Apparatus for Locating Foreign Bodies by Radioscopy.

32 La sphygmotonosométrie clinique. Boulomié.

33 *Breast Nursing by Workingwomen. P. Budin.—De l'allaitement au sein par les ouvrières d'usines, de fabriques, de manufactures.

30. The Nascent State as It Affects the Properties of Drugs.—Robin urges the importance of the recent discoveries in regard to the exaltation of the special properties of certain chemical bodies in the nascent state, citing peroxid of hydrogen as a type. It has been found that certain salts will crystallize in a solution of hydrogen dioxid. The crystals formed by ammonium sulphate dissolved in 30 per cent. solution of hydrogen dioxid, contain one molecule of the latter. These crystals smell of ozone, but gradually yield their peroxid of hydrogen to the air. Sodium sulphate crystallizes with one molecule of water and one of the peroxid of hydrogen. Sodium acetate will combine with the solution of hydrogen dioxid to 22 per cent. of its weight. Since the peroxids take up always the same amount of the solution of hydrogen dioxid, it is thus possible to dose it accurately, and to enhance the action of the salt by superposing on it the action of the nascent oxygen, each magnifying the effect of the other. Robin's experiments have shown that by this reciprocal action astonishing therapeutic results may be realized with minimal doses, as, for instance, by combining with ordinary sodium sulphate some of the drug containing a molecule of the solution of hydrogen dioxid in its composition. This combination empties and disinfects the bowels at the same time. He describes several cases treated on these principles. The peroxids of calcium and of magnesium give up their oxygen in contact with the gastric juice, but when administered in keratin capsules they do not display their antiseptic properties until they reach the intestines. They are particularly useful in diarrhea due to fermentations, their prompt effect being useful to differentiate this form from others of nervous, serous, vasomotor or other origin, on which they have no effect. The peroxids of zinc and sodium have been used to advantage in dermatology. The benefits derived from some of the new synthetic remedies are evidently due to the nascent state into which they enter on contact with the organic fluids and tissues. The doses generally employed are far larger than are actually necessary. Robin has been making extensive therapeutic use of what he calls iodized sulphur, S_2I, the chemical activity of the elements in the nascent state being so great that 10 to 30 cg. taken during the meal, while free from any inconveniences, have a most excellent effect on all gaseous fermentations in the stomach or intestines. Iodized sulphur may supplant iodoform in surgery as its action is much more energetic than that of the latter, while it is less expensive. He has found the double iodid of bismuth and cinchonidin a remarkably useful combination, as all three elements are given up on contact with the tissues. Atony and putridity of wounds, fermentation in the stomach and intestines (especially butyric fermentation), and fetor are the chief indications for this combination, which he calls "erythrol." Every alkaloid is able to form a double salt with bismuth iodid, as, for instance, the double iodid of bismuth and of morphin—a peculiarly valuable application for atonic, putrid and painful wounds. Whatever the characteristics of the wound, a combination can be formed to meet them and apply the needed drugs in the nascent state, as can also be done in the domain of internal medicine.

33. Breast Nursing by Workingwomen.—Budin commends the recent step taken by a manufacturing firm at Elbeuf. A placard has been posted announcing that every facility will be afforded to women employed in the factory to enable them to nurse their infants, and proclaiming the advantages of breast nursing. The women are given leave of absence at certain hours to go to the crèche near-by and give their babes the breast, while $20 is deposited by the firm in the savings bank in the name of the child thus nursed by its mother, and the bank book is given to her. A certain number of the factories in France have organized crèches on the grounds, others set apart a certain room where the babes are brought at certain hours to be nursed. In Italy a room of this kind is obligatory in every establishment employing more than fifty women.

Presse Médicale, Paris.

Last indexed XLII, pages 1189, 1200 and 1205.

34 (I. No. 25.) *Les injections épidurales. Etat actuel de la question en particulier dans l'incontinence d'urine. F. Cathelin.

35 L'evolution de la médication créosotée. F. Bousquet.

36 (No. 26.) L'hospitalisation des tuberculeux à Paris. E. De Lavarenne.

37 L'hydronéphrose. La valeur thérapeutique de son traitement conservateur. T. Tuffier.

38 Les causes d'erreur dans l'étude clinique de la coagulabilité du sang. G. Milian.

39 La pathogénie de la pelade (alopecia areata). Byrnud.

40 *Sea Water an Organic Medium. René Quinton. Abstract.

41 (No. 27.) *Association des médecins du département de la Seine. E. De Lavarenne.

42 La leucémie aigue. Etude clinique et hématologique. E. Rist and L. Ribadeau-Dumas.

43 La question du lait au point de vue de sa composition chimique (the milk question). P. Difforth.

44 Le traitement de l'entéro-colite muco-membraneuse par l'électricité. A. Zimmern.

45 Experimental Sleeping Sickness. Brumpt and Wurtz. From society report.

46 *Sterilization by Brief Passage Through a Flame or with Ignited Alcohol. Claudot and others. Abstract.

34. Present Status of Epidural Injections.—It is nearly four years since Cathelin first inaugurated the method of epidural injections for treating incontinence of urine and other urinary psychoses. It has been systematically tested and adopted in various countries, as he shows here by citing the publications on the subject. The two special indications for its use are incontinence of urine and pains in the submammary region. Its harmlessness is fully established by the entire absence of mishaps in the course of more than two thousand applications in his hands. About 75 per cent. of the subjects with incontinence of urine were completely cured; others notably improved, and scarcely ever were the results entirely negative. The general testimony from all sides is to the effect that this treatment is harmless, rapid, effectual, its effects immediate, and free from all inconveniences. The injections act by the traumatism and the compression modifying the character and the quality of the nervous influx. It is possible also that there may be some chemical influence from the salt in the solution employed. The technic now used does not differ materially from that described in THE JOURNAL, 1901, xxxvii, pages 150 and 793, and 1902, xxxviii, page 1282.

40. Sea Water an Organic Medium.—Quinton argues to the effect that the first living cells developed in the sea, and hence that all living beings trace their origin to this medium. Animal existence has always tended to maintain the cells, composing each organism, in a marine medium. Every living being is an actual sea-water aquarium, the primal aquatic conditions necessary for cell life being perpetuated indefinitely through the more complicated organisms. Every human being contains nearly a third of his weight in sea water.

41. French Medical Mutual Aid Society.—This article is a historical sketch of the Association of Physicians of the Seine department since its foundation seventy-one years ago. It has received various bequests, its endowed capital being now $360,000. The initiation fee is $2.40, and the annual dues $4. This entitles the member to financial aid at need, the maximum thus far paid being $240 a year to physicians and $160 to the widow or children. The association has also several pensions to bestow on physicians who have been members for more than

fifteen years. During the last eighteen years the sums distributed to members in need have amounted to a total of $170,000. The present number of members is about 587, and the association had 400 from its very inception in 1833.

46. **Sterilizing by Singeing.**—Claudot and Niclot relate they were able to obtain cultures after virulent cultures of staphylococci, tetanus and anthrax bacilli had been placed in a bowl and alcohol poured over them and ignited. This has always been supposed to be an efficient mode of sterilizing, but this research shows that it is not inevitably effectual. Bérard found also that even direct singeing with a Bunsen flame did not kill the germs, especially when they were protected by a thin layer of dried blood or pus.

Revue de Gynécologie, Paris.

Last indexed XLII, page 806.

47 (VIII, No. 2.) La grossesse tubaire bilatérale (tubal pregnancy). F. Jayle.
48 Cas d'hémangiome caverneux du mésentère compliqué d'occlusion intestinale. C. Julliard (Geneva).
49 *Les périgastrites consécutives aux ulcères de l'estomac. Delay and P. Cavaillon (Lyons).
50 Carcinose sous-cutanée et péritonite cancereuse consécutives à un cancer de l'estomac. A. Reverdin and Veyrassat.
51 Contribution à la chirurgie du canal hépatique d'après 3 cas personnels et les travaux les plus récents. H. Delagénière (Mans).

49. **Perigastritis Consecutive to Ulcers of the Stomach.**—This monograph is based on 14 cases observed at Jaboulay's clinic and the data found scattered through the literature. The adhesions that form indicate the activity of the ulcer, and are generally absorbed as the latter heals. Treatment should be addressed to the ulcer. Surgical interference is indicated early in case the signs of perigastritis are superposed on the "epigastric plastron," the index of an ulcer in full activity. Gastroenterostomy, with excision, affords ideal conditions for the cure of both ulcer and perigastritis. Treatment should consist of drainage without disturbing the adhesions. In case the abscess happens to be in the posterior cavity of the omentum, the latter should be stitched to the wall after it is opened, to marsupialize it like a kangaroo's pouch.

Semaine Médicale, Paris.

52 (XXIV, No. 22.) *Tuberculose musculaire primitive à foyers multiples (with multiple foci). F. Lejars.
53 *Technic and Indications for Oxygen Treatment of Wounds, Furuncles, etc. Thiriar (Brussels). Abstract.
54 Gelatin in Lime Water for Mucomembranous Enterocolitis. Quennec. Abstract.

52. **Primary Tuberculosis in the Muscles.**—Lejars gives illustrations of a case of multiple tumors in the muscles, not adherent to the bone or skin, generally ovoid, some of them measuring 6 by 10 cm. The tumors developed in the course of five months. They were excised and tubercle bacilli found numerous in them. Other tumors developed after the operation, requiring renewed intervention, but there has been no further tumor development since. The patient, a man of 51, had a winter cough for five years, with a little crepitation at the apices, but nothing else to suggest tuberculosis, until these tumors developed. A Leipsic thesis, 1901, by Steinbach, relates a similar case. The "tuberculomas" were all excised in April, but a new growth of four tumors required extirpation in July, three more in October and two in November, after which there was no further tumor formation during the four months the patient was under observation. The patient was a young man, otherwise apparently healthy.

53. **Oxygen Treatment of Wounds and Other Lesions.**—Thiriar reiterates that the direct application of oxygen to wounds and suppurating lesions has a remarkably beneficial action. He uses the solution of hydrogen dioxid, but supplements it by spraying the part with a jet of oxygen gas. The effect is very evident when the jet of oxygen is directed into the crater of a furuncle or carbuncle, as also when used in the peritoneum after evacuation of the ascites in a tuberculous peritonitis. In erysipelas he sprays the lesions every hour or two hours with the jet of oxygen gas. In case of gaseous septicemia, he induces emphysema with oxygen and air. The jet of oxygen gas hastens the healing of fistulas and of intrauterine lesions. Lesions induced by the tubercle bacillus and the gonococcus alone are not modified by the oxygen, but when there is mixed infection, especially in bone lesions, the oxygen will be found extremely useful.

54. **Gelatin and Limewater in Mucomembranous Enterocolitis.**—Quennec reports the cure of 10 cases of this affection by administration of gelatin and limewater. The patient is kept in absolute repose in bed and given every hour, for sole nourishment, a cup of warm milk containing 20 c.c. of a 5 per cent. solution of gelatin and a teaspoonful of limewater. The intestines are evacuated by copious lavage with boiled water. A light diet can be resumed in six to ten days as the symptoms vanish, but it is wise to continue small doses of the gelatin for a while to prevent relapses.

Berliner klinische Wochenschrift.

55 (XLI, No. 21.) *Diagnostic Value of Examination of Cerebrospinal Fluid in Nervous and Mental Affections. E. Siemerling.—Ueber den Werth der Untersuchungen des Liq. cerebrospinalis für die Diagnose der Nerven- und Geisteskrankheiten.
56 Ueber das Vorkommen von Pentosurie als familiäre Anomalie. M. Bial.
57 *Verhalten der faradocutanen Sensibilität nach Anwendung hydriatischer Procedures. Jansen.
58 Ueber Angina und Stomatitis ulcerosa. Többen.
59 Die Lipomatosis als Degenerations-Zeichen. E. H. Kisch.
60 *Ueber Nephritis heredo-syphilitica bei Säuglingen und unreifen Früchten (in nurslings and fetuses before term). Cassel.
61 *Liver Pulse and Compensation of Valvular Defects. F. Volhard (Riegel's clinic, Giessen).—Ueber Leber-Puls und über die Compensation der Klappenfehler.
62 *The Medical Institutes and Hospitals in Denmark, Sweden and Norway. Schaper. From society address.

55. **Diagnostic Import of Cerebrospinal Fluid.**—This article was first delivered as an address at the German Congress of Psychiatry in April. Siemerling is convinced that examination of the cells in the fluid, and of its chemical and physical characteristics affords most valuable information. Pronounced lymphocytosis indicates irritation of the meninges. If the fluid becomes turbid on addition of magnesium sulphate, this indicates an increase in albumin content. In case of a fresh hemorrhage, all the blood corpuscles can be centrifuged out, leaving the fluid limpid. This chromodiagnostic may, in certain cases, give a clue as to the source of the hemorrhage. He relates the particulars of 75 cases in which the fluid was examined. The results were positive in 37 out of the 38 cases of progressive paralysis, and he is convinced that the lymphocytosis observed may be regarded as an early symptom of this affection. It was accompanied by cloudiness on addition of magnesium sulphate in all the cases. He also reviews the literature on the subject.

57. **Cutaneous Sensibility to Faradism After Hydriatic Procedures.**—Jansen's researches were conducted at the Hydrotherapeutic Institute connected with the University of Berlin. One of the points noted is that in different persons suffering from the same affection, the same procedure is liable to induce entirely opposite results. This not only emphasizes the importance of individualizing treatment, but it likewise indicates that even in the case of hysterics and neurasthenics, we ought not to charge every anomaly we observe to the account of autosuggestion.

60. **Fetal and Infantile Nephritis as a Manifestation of Inherited Syphilis.**—Cassel discovered albumin in the urine of 6 out of 31 infants exhibiting indications of inherited syphilis. The clinical manifestations of the nephritis were minimal, and macroscopic examination of the kidneys of 5 of these infants, and of 7 others in a similar condition, failed to reveal anything abnormal except in the rarest instances. Histologic examination, on the other hand, revealed interstitial and periadventitial proliferation and cystic degeneration of the glomeruli, with—in the fetus—arrested development of the organ. This latter explains much of the clinical pathology of children with inherited syphilis and their lessened resistance to infections, etc.

61. **"Liver Pulse" and Compensation of Valvular Defects.**—Volhard uses a double manometer for research on the pulsation in the liver, and relates the clinical history and the findings in 2 cases of enlarged liver with marked pulsation in the

neck and liver. In one the pulsation was positive, that is, systolic. The patient had mitral stenosis and organic tricuspid insufficiency with what he regards as a pathognomonic symptom of the latter—a seesaw movement of the front wall of the thorax. The second patient, with very pronounced negative liver pulse, had a chronic pericardial effusion, although apparently in perfect health to a layman's eye.

62. Hospitals and Other Medical Institutions in Denmark, Sweden and Norway.—Schaper has returned from a trip to the northland full of admiration for the model medical institutions he found there. Every one of the larger hospitals in Norway and Sweden has one pavilion devoted to all kinds of baths in addition to the ordinary bathing facilities in each ward. Male nurses are very rare. The nurses, after twenty-five years of service, are entitled to a small pension. In case of an infectious disease an ambulance is dispatched on receipt of the telephone message, and the hospital and ward are notified by telephone that the patient is coming, by which means contact with the infected subject can be avoided. He adds that the lack of these precautions was grievously felt in the recent plague case in Berlin. The hospital facilities at Stockholm are so ample that there are 9 beds for each 1,000 inhabitants. The medical course in Sweden requires twenty semesters and in Norway fourteen, but the first two years are devoted more to the accessory sciences. Owing to the ample material, during the last six semesters the students are given special patients in the hospitals to treat, and are compelled to write out in detail the reports, which are then gone over by the professor in the class and criticised. The great Sabbatsberg Hospital at Stockholm has a detached tuberculosis annex and also a most attractive convalescent home. Still another annex is for delirious and noisy patients. Stockholm also has two shelters with 12 beds in each, for persons who become helpless in the street, with separate rooms for deliqious subjects. Christiania has a model centralized arrangement for reception of the sick. The physician in charge resides, with his family, in a centrally located building, formerly a hospital. Every morning the different hospitals telephone to him what empty beds are at their disposal in the different wards. He is notified by telephone when a sick person is coming. He can thus distribute to the best advantage the sick as they arrive. He keeps a detailed register of each person, noting where he comes from and other minor details. The city has only 250,000 inhabitants, and this plan was opposed at first by some of the professors, but as time has shown its advantages, all are now enthusiastic over it. In Sweden and Denmark anti-diphtheria serum is given free for prophylactic injections and the dose of 4,000 units costs only about six cents. Schaper describes Finsen's Institute in detail. The state pays $7,000 that the poor can be treated there without charge, but this amount does not pay more than half the expense, the rest being made up by wealthy persons. Finsen has been constantly confined to his room during the last few years, but from his sickbed he has been able to almost eradicate lupus from Denmark. The average duration of the affection in the 1,000 patients treated was eleven years, but 5 have been cured who had been afflicted for fifty years. In 72 per cent. of his total material the mucosæ were involved. Last year he published the detailed report of his first 800 cases, with 51 per cent. apparently cured and 24 per cent. progressing toward a cure; 11 per cent. materially improved; 5 per cent. not satisfactorily influenced, and 9 per cent. who abandoned treatment for personal reasons. Of the total number 33 have died, 21 from general tuberculosis, 4 from heart disease and 4 from cancer. The treatment was more or less successful in 737 out of the 800 cases, that is, in 94 per cent. With improved technic the duration of treatment has been reduced, although he still estimates that from 40 to 200 exposures are necessary. Mild cases can be cured in six weeks; moderately severe in three months; extensive cases in six months, and very extensive in a year. Two sittings a day cause a strong reaction, but the inflammation completely subsides by the end of the week, when the patient is ready for another sitting. Arrangements are made in the Institute for the instruction and amusement of the patients under treatment, and opportunities are given them to be more or less self-supporting.

Deutsche medicinische Wochenschrift, Berlin and Leipsic.

63 (XXX, No. 22.) *The Blood Supply and Curability of Tumors. H. Ribbert (Göttingen).—Ueber das Gefässsystem und die Heilbarkeit der Geschwülste.

64 Zur Pharmakologie des Tannins und seiner Anwendungsformen. L. Lewin (Berlin).

65 Ueber Veronal. J. Jolowicz. Also Pfeiffer in preceding number.

66 Zur Sero-Diagnostik des Typhus abdominalis mittelst des Pfeifferschen Diagnosticums. Gramsma.

67 Zur Kenntnis der Sensibilisierung (sensitisation). Halberstaedter and Neisser.

68 *Ueber eine neue Funktions-Prüfung des Herzens (functional heart test). M. Katzenstein.

69 Ueber Broncho-Stenose. A. Fraenkel (Berlin). (Commenced in No. 21.)

70 Sleeping Sickness in Togo. K. Hintze. (Commenced in No. 21.)

71 Schweninger's Water Treatment of Syphilis. Goldschmidter. —Noch einmal die Syphilis-Behandlung im Lichterfelder Krankenhause.

63. Blood Supply of Tumors and Their Curability.—Ribbert emphasizes the defective blood supply in tumors, the lack of true arteries and veins and of normal functional interrelations between the cells and the vessels. The latter are merely tubes, they do not branch and consequently the cells of the tumor are imperfectly nourished. He does not regard the tumor cells as biologically essentially different from normal cells; the chief difference is merely that they are less highly differentiated. Their active proliferation is due to their environment. They possess the normal proliferating capacity, but it proceeds uncontrolled by the inhibiting influences normally at work in the organism. He has scraped away the epidermis on a certain small spot at intervals of three or four days, and found that each time the epidermis grew again rapidly, the regeneration proceeding just as rapidly at the hundredth repetition of the scraping as the first time, fourteen months before. He thinks that this fact demonstrates that no increase in vital energy is necessary to explain the excessive growth in tumors. It is merely the result of special conditions allowing the normal vital energy of the cells comparatively unlimited play. But the tumor cells, on account of their defective blood vessels, are peculiarly non-resistant and hence succumb to influences which affect them unfavorably while displaying no action on normal cells. He refers to influences such as the x-rays, radium rays, injection of alcohol, application of arsenious acid, of bacterial toxins, etc.

68. New Functional Test of the Heart.—Katzenstein's test is based on the observation that when the arterial circulation is obstructed at some important point, the heart has to work extra hard to compensate it. A vigorous heart can accomplish this without hastening its beat, but a weak heart can do the extra work only by increasing the number of its beats per minute. He has experienced mishaps from inadequate heart action after tests by percussion, auscultation, etc., had apparently demonstrated the integrity of the heart. The functional test he proposes, however, reveals weakness of the organ when all other signs fail, as he has established by observation of 128 clinical cases, with more than 300 single tests. It is merely the compression of both iliac arteries close to Poupart's ligament, for two and a half to five minutes, observing the variations in pulse and blood pressure with the Gaertner tonometer or other similar instrument. The pulse remains unchanged or slightly retarded in a subject with a sound heart, while the blood pressure rises. In subjects with weak hearts the pulse becomes accelerated while the blood pressure is unchanged or drops. The patient reclines quietly for a time before and during the test, which has thus the advantage that it does not disturb him. The arteries are compressed against the bone with the middle finger of each hand. A typical record reads as follows: Pulse—Before, 80; during (2.5 minutes), 76; (5 m.), 72; afterward (5 m.), 76; (15 m.), 80. Blood pressure—Before, 90; during (at same intervals as above), 98, 100; afterward, 95, 90. The conditions are thus seen to return to their previous state by fifteen minutes afterward. He accepts as a standard of normal function that the blood pressure rises from 5 to 15 mm. mercury while the pulse remains unchanged or is slightly retarded. In the 13 cases

of hypertrophy of the left ventricle the blood pressure rose more than 15 mm. mercury, but the pulse did not vary or was slightly retarded in the cases in which the heart was still acting satisfactorily, while in those of cardiac incompetency the pressure did not rise to this extent, but the pulse became accelerated. The article is continued.

Münchener medicinische Wochenschrift.

72 (I, No. 18.) *Ueber die Einwirkung der Röntgen-Strahlen auf innere Organe. H. Heinecke (Leipsic).
73 *Zur Beurtheilung der Tuberkulin-Reaktion. H. Smidt.
74 Einwirkung der Wechselstrombäder auf das Herz (action of alternating current electric baths on heart). T. Büdingen and G. Gönner (Constance).
75 Ueber Inhalations-Versuche mit phenyl-propiol-saurem Natron nach Dr. Balling. Ihlan and Wiesmüller.
76 Zur Kasuistik der kongenitalen Herzfehler und deren möglichen Folgen (heart defects and possible consequences). H. Rhinelander, Phil., Max Cohn.
77 Tardy Rupture of Uterus After Curetting. B. Heuck.—Gebärmutterzerreissung.
78 Ueber medizinisch-artistische Studien. Brissaud.
79 Leonardo da Vinci's and Vesalius' Obstetric-Anatomic Plates. G. Klein. Abstract.

72. **Influence of Roentgen Rays on Internal Organs.**—Heinecke has found that even a brief exposure to the Roentgen rays induces a destructive process in the lymph follicles. He experimented with mice, rabbits and dogs. In the latter animals fifteen minutes' exposure of the abdomen to a hard tube at a short distance was enough to induce distinct destruction of the nuclei in the follicles of the spleen, of the mesenteric lymph glands and of the intestinal canal. The exposure was too brief to cause much reaction on the part of the skin. The lesions induced were not permanent, and nothing pathologic could be discovered after a week or two. The lymph glands are affected without the period of lateney and cumulative action noted in case of the skin. They are also much more sensitive to the action of the rays than the latter. The results observed indicate that these same processes must occur in man also under the influence of the rays, and he suggests the possibility that they may prove useful as a therapeutic measure in affections involving the lymphatic apparatus. It will not be necessary to induce a reaction on the part of the skin. As the action of the Roentgen rays on adenoid tissue is destructive, it is indicated in cases of pathologically increased growth or hyperfunction of the lymphatic system, as, for example, in the group of pseudo-leukemias, chronic enlargement of the spleen, malignant lymphoma and lymphosarcoma and the various forms of leukemia. These rays might also be tried when there is reason to assume the presence of an abnormally large thymus. Heinecke adds a note in correcting the proof of his article that his theoretical assumptions have already received confirmation by the news from America that Senn and Crane have cured cases of leukemia and pseudo-leukemia by Roentgen treatment. Ahrens, in Germany, has also announced the cure under Roentgen treatment of a severe case of splenic leukemia with much enlarged spleen, although the details have not yet been published.

73. **Tuberculin Reaction.**—Smidt reports that Rumpel has been making a practice recently of injecting tuberculin as a diagnostic measure in severe cases liable to come to autopsy, and in which the discovery of a complicating tuberculosis would have great diagnostic and hence therapeutic value. Stintzing has reported 5 such cases from the Jena clinic. No reaction occurred in 4, and no tuberculous foci could be discovered in them. Ten of the numerous patients given the tuberculin test by Rumpel came to autopsy. In 8 the postmortem findings corresponded with the results of the test. In 2 of the others not a trace of tuberculosis could be discovered, although the reaction had been positive. In another case there was no reaction to the tuberculin, although tuberculous lesions were found in the cadaver. The ninth patient was a leper, the disease of long standing, with a suspicion of tuberculosis of the lungs. He reacted to the tuberculin test and a subfebrile temperature persisted for nearly two weeks, then increased and assumed a remittent character with rapidly progressive tuberculous lesions in the lungs. It seemed as if the tuberculin had converted a dormant process into an active one. The result was still more disastrous in the tenth case. The patient was a man of 30 with extensive tuberculous lesions in pleura and peritoneum. Although they must have long existed, they caused such slight symptoms that they had not been diagnosed accurately. He reacted with a chill and fever to the second tuberculin injection; 1 mg. had been injected the first time, with no reaction, and 5 mg. the second time, a week later. As the diagnosis was still uncertain, a third injection of 5 mg. was given. It was followed by a severe febrile reaction, rapid respiration, failing pulse and fatal collapse in a little more than twenty-four hours after the injection. Smidt thinks that the only explanation of this case is the possibility that the bacterial products formed in the extensive tuberculous processes and retained in an attenuated form in the body, must have been completed by the introduction of the tuberculin. This supposition has no analogy in our present knowledge of toxins, but would explain the hypersusceptibility of the organism as induced by auto-immunizing processes in response to the injection of the tuberculin. In still another case a typical reaction to the tuberculin was obtained which could have been only the result of the autosuggestion of hysteria. Fuerst recently observed a case of traumatic hysteria in which a reaction to tuberculin was obtained. The same reaction followed an injection of water, and also the mere introduction of the needle into the skin of the back.

Books Received.

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Issued Monthly. Under the General Editorial Charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-graduate Medical School. Vol. VI. General Medicine. Edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, and J. H. Salisbury, M.D., Professor of Medicine, Chicago Clinical School. May, 1904. Cloth. Pp. 330. Price, $1.00. Chicago: The Year Book Publishers.

MEDICAL DIAGNOSIS. Special Diagnosis of Internal Medicine. A Handbook for Physicians and Students. By Dr. Wilhelm v. Leube, Professor of Medicine and Physician-in-chief to the Julius Hospital at Würzburg. Authorized Translations from the Sixth German Edition. Edited, with Annotations, by Julius L. Salinger, M.D., Late Assistant Professor of Clinical Medicine in the Jefferson Medical College. With 5 Colored Plates and 74 Illustrations in the Text. Cloth. Pp. 1,058. Price, $5.00. New York and London: D. Appleton & Co. 1904.

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Armory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia. Assisted by H. R. M. Landis, M.D., Assistant Physician to the Out-patient Medical Department of the Jefferson Medical College Hospital. June 1, 1904. Paper. Pp. 334. Price, $6.00 per annum. Philadelphia and New York: Lea Brothers & Co.

LECTURES ON CLINICAL PSYCHIATRY. By Dr. Emil Kraepelin, Professor of Psychiatry in the University of Munich. Authorized Translation from the German. Revised and Edited by Thomas Johnstone, M.D. Edin., M.R.C.P. Lond., Member of the Medico Psychological Association of Great Britain and Ireland. Cloth. Pp. 306. Price, $3.50 net. New York: Wm. Wood & Co. 1904.

RAILWAY AND OTHER ACCIDENTS, with Relation to Injury and Disease of the Nervous System. A Book for Court Use. By Allen McLane Hamilton, M.D., F.R.S.E., Late Clinical Professor of Mental Disease in Cornell Medical College. With 18 Plates, 2 Superimposed Charts and 86 Illustrations. Cloth. Pp. 351. Price, $3.50 net. New York: Wm. Wood & Co. 1904.

MODERN OPHTHALMOLOGY. A Practical Treatise on the Anatomy, Physiology and Diseases of the Eye. By James Meeker Ball, M.D., Professor of Ophthalmology in the St. Louis College of Physicians and Surgeons. With 417 Illustrations in the Text and Numerous Figures on 21 Colored Plates. Cloth. Pp. 819. Price, $7.00. Philadelphia: F. A. Davis Co. 1904.

FIRST ANNUAL MESSAGE OF JOHN WEAVER, MAYOR OF THE CITY OF PHILADELPHIA, with the Annual Reports of the Director of the Department of Public Health and Charities and Chief of the Bureau of Health for the Year Ending Dec. 31, 1903. Issued by the City of Philadelphia, 1904. Cloth. Pp. 198. Philadelphia: Dunlap Printing Co. 1904.

UNCONSCIOUS THERAPEUTICS, or the Personality of the Physician. By Alfred T. Schofield, M.D., M.R.C.S., etc., Hon. Physician to Friedenheim Hospital. Cloth. Pp. 317. Price, $1.50 net. Philadelphia: P. Blakiston's Son & Co. 1904.

ANNUAL REPORT OF THE PRESBYTERIAN MISSION HOSPITAL, MIRAJ, SOUTHERN MAHRATTA COUNTRY, Established 1892. In Connection with the Western India Mission of the Board of Foreign Missions of the Presbyterian Church in the U. S. A. For the Year 1903. Paper. Pp. 82.

THE ELEMENTS OF KELLGREN'S MANUAL TREATMENT. By Robert F. Cyriax, M.D., Edinburgh, 1901. Cloth. Pp. 506. Price, $4.00 net. New York: Wm. Wood & Co. 1904.